
North Mississippi Refuges Complex

including:

Dahomey NWR, Tallahatchie NWR, and Coldwater River NWR

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Cover Photograph. Photo 1. Cardinal at Tallahatchie NWR. Photo by Ramsey Russell.

INTRODUCTION

The North Mississippi Refuges Complex (NMRC), formerly the Mississippi Wetland Management District, was established in Grenada, Mississippi in 1989, primarily to manage the increased land base being acquired through the transfer of properties to the U.S. Fish and Wildlife Service (Service) by the Farmers Home Administration (FmHA), now the Farm Services Administration (FSA), and the acquisition of **Dahomey, Coldwater River** (formerly part of Tallahatchie NWR), and **Tallahatchie National Wildlife Refuges** (NWR). At that time, there were no other stations in an appropriate geographical location to manage these lands. After several management decisions and boundary changes, NMRC's final geographical boundaries contained 26 counties in northern Mississippi. NMRC is divided into three work areas. Each work area is comprised of one refuge and all FmHA properties within that area (Figure 1).

FmHA Lands are properties on which the United States Department of Agriculture (USDA) foreclosed, or the owner voluntarily deeded his land back to the USDA due to lack of payment on loans. The original owner was given the right to buy back his land, but Executive Order 11990 required the wetlands on these properties be set aside or protected. Most of the properties that the original owners did not buy back were transferred fee title to the Service to manage. Other such properties were repurchased by the original owner, but were now subject to restrictive easements. Easement management responsibilities for these properties were transferred to the Service and are considered as units of the National Wildlife Refuge System. **FmHA Lands** range from 1 acre to over a 1,000 acres in size and are categorized as follows:

- 1) **Fee Title Properties:** These properties are now considered public land and are managed as units of the National Wildlife Refuge System..
- 2) **Conservation Easements:** The ownership of these properties remains in the private sector, but the Service retains most management rights. For example, these lands are no longer farmed, and the Service is allowed to mow, install water control structures, build levees, burn, plant seedlings or acorns, and manage water levels.
- 3) **Floodplain Easements:** The least restrictive of the two easements, ownership remains in the private sector with deed restrictions which prohibit degradation of existing floodplain values. The land owner is allowed to farm acreage that was previously in cultivation, but the easement prevents further draining or clearing of the land. These easements often contain smaller more restrictive conservation easements within their boundaries.

In 1989, there were four recorded easements for a total land base of 1,070 acres. As of 2001, NMRC manages three traditional NWRs totaling 15,842 fee acres, 48 **FmHA Fee Title** transfers totaling 10,684 acres, 58 **Conservation Easements** totaling 4,368 acres, and 22 **Floodplain Easements** totaling 2,167 acres (Figure 2 and Table 1). The NMRC now manages 128 FmHA tracts and three NWR totaling 33,061 acres.

North Mississippi Refuges Complex (NMRC)

Coldwater River, Dahomey and Tallahatchie NWRs

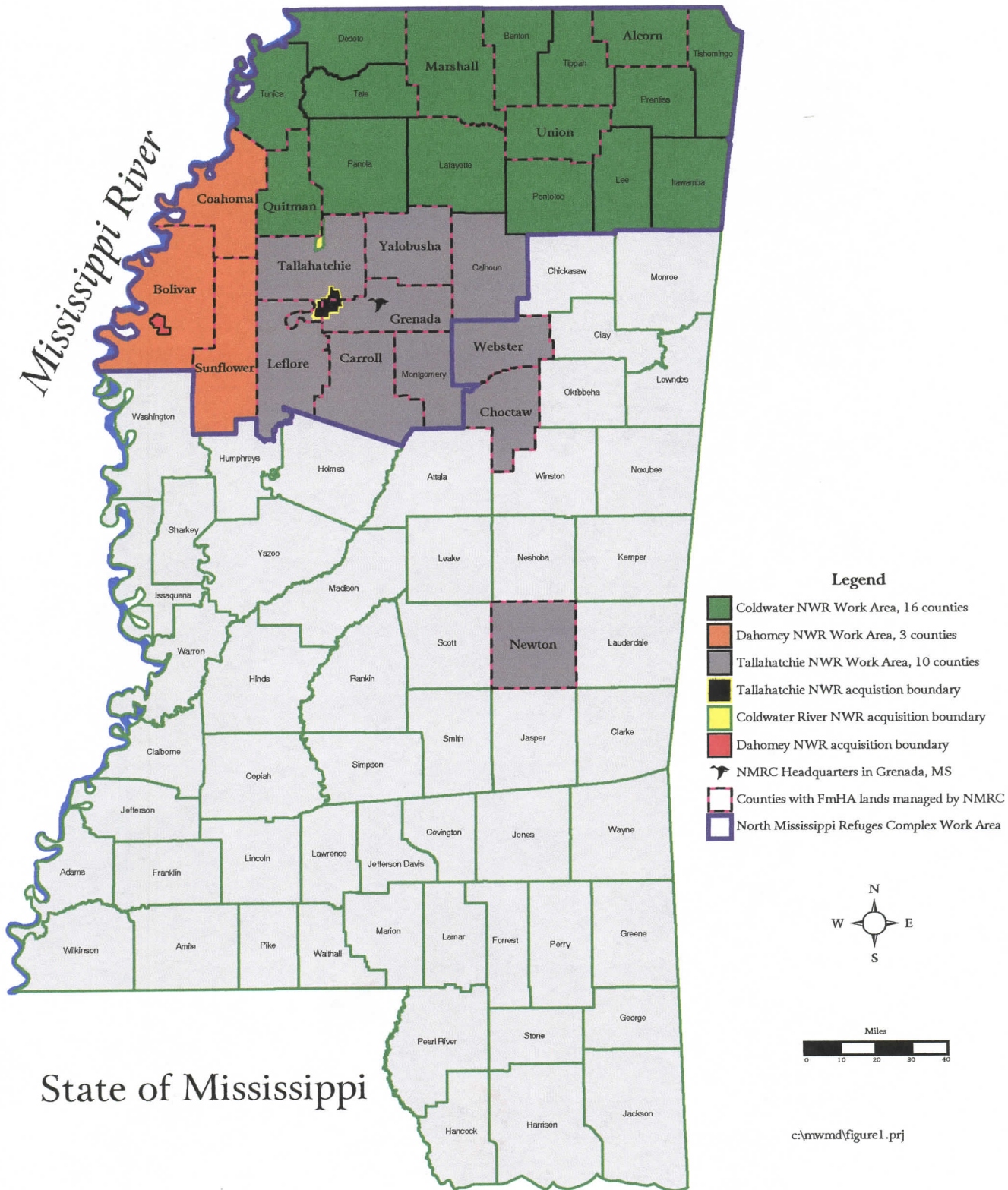


Figure 1. Refuge and work area locations for NMRC.

Table 1. Properties managed by North Mississippi Refuges Complex.

REFUGE PROPERTIES								
NAME	COUNTY	ACRES	ESTATE	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	YEAR ACQUIRED	LAT/LON
Dahomey NWR								
Allen Gray Estate/TNC	BOLIVAR	9,269	Fee Title	CHOCTAW, PACE	BEULAH, LOBDELL	T22N R7W SEC. 17, 19, 22 & 27-34; T21N R7W SEC. 1-4 & 9-12	1993	33°42'N 90°55'W
MS Dept of Trans. (DOT)	BOLIVAR	162	Fee Title	CHOCTAW	LOBDELL	T22N R7W SEC. 34	1991	33°42'N 90°54'W
West Boliver Co. School Board	BOLIVAR	260	Lease	CHOCTAW, PACE	BEULAH, LOBDELL	T22N R7W SEC. 16	N/A	33°45'N 90°09'W
DAHOMEY NWR	TOTAL ACRES	9,691						
TALLAHATCHIE NWR								
Walker Tract	TALLAHATCHIE	557	Fee Title	PHILIPP	CASCILLA	T23N R2E SEC. 21, 22 & 28	1991	30°50'N 90°05'W
John Whitten	GRENADA, TALLAHATCHIE	509	Fee Title	PHILIPP	PHILIPP	T22N R1E SEC.13 & 24; T22N R2E SEC. 18	1992	33°45'N 90°08'W
John Hancock	GRENADA, TALLAHATCHIE	1,361	Fee Title	PHILIPP	PHILIPP	T22N R1E SEC. 1, 12 & 13; T22N R2E SEC. 7 & 18	1992	33°47'N 90°08'W
Chicago Mills/DOT	TALLAHATCHIE	1,656	Fee Title	GREENWOOD, PHILIPP	MONEY, PHILIPP	T22N R1E SEC. 14, 22-27 & 34	1997	33°45'N 90°09'W
TALLAHATCHIE NWR	TOTAL ACRES (Fee Title only)	4,083						
COLDWATER RIVER NWR								
Travelers Insurance	QUITMAN, TALLAHATCHIE	1,730	Fee Title	CROWDER	FISH HOOK LAKE	T26N R2E SEC. 30 & 31; T26N R1E SEC. 25 & 36	1991	34°5'N 90°08'W
Shiele Tract	TALLAHATCHIE	40	Fee Title	CROWDER	CROWDER	T26N R2E SEC. 7	1996	34°8'N 90°08'W
Duck Ponds Inc.	QUITMAN, TALLAHATCHIE	298	Fee Title	CROWDER	FISH HOOK LAKE	T26N R2E SEC. 19; T26N R1E SEC. 24	1996	34°6'N 90°08'W
COLDWATER RIVER NWR	TOTAL ACRES	2,068						
FmHA FEE TITLE PROPERTIES								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
CARMICLE	BOLIVAR	40	14.00	PACE	SHELBY	T24N R6W SEC. 26	07/26/91	33°54'N 90°47'W
GOSS	BOLIVAR	543	17.00	MELLWOOD	ROUND LAKE	T26N R6W SEC. 35 & 36; T25N R6W SEC. 2	07/14/94	34°05'N 90°47'W
HESTER, T. III	BOLIVAR	389	13.00	PACE	PACE	T23N R6W SEC. 1	07/26/91	33°52'N 90°46'W
HOLCOMB, D.	BOLIVAR	40	12.00	CLARKSDALE	DUNCAN	T25N R5W SEC. 13	07/26/91	34°02'N 90°40'W
RAY	BOLIVAR	50	18.00	PACE	SHELBY	T25N R6W SEC. 33	09/27/94	33°59'N 90°49'W
RILEY	BOLIVAR	100	11.00	MOUND BAYOU	MERIGOLD	T23N R5W SEC. 13	07/26/91	33°50'N 90°40'W
WATTS, J.	BOLIVAR	214	16.00	MELLWOOD	ROUND LAKE	T25N R6W SEC. 4	07/31/92	34°04'N 90°50'W
WATTS, J.	BOLIVAR	81	16.00	MELLWOOD	ROUND LAKE	T26N R6W SEC. 33	07/31/92	34°04'N 90°49'W
GILLON	GRENADA	245	11.00	GRENADA	GRENADA	T22N R5E SEC. 21	07/14/93	33°45'N 89°46'W
GWIN	LEFLORE	343	16.00	SUMNER	GLENDORA	T22N R2W SEC. 13 & 24	02/19/92	33°45'N 90°21'W
HENSON	LEFLORE	165	19.00	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 19	07/15/92	33°19'N 90°20'W
HENSON / A.C.O.E.	LEFLORE	275	no	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 19	?	33°19'N 90°20'W
KIMBROUGH, A.M.	LEFLORE	40	18.00	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 18	04/18/92	33°19'N 90°20'W
MILLICAN, H.	LEFLORE	2	17.00	SEVEN PINE	SIDON	T18N R1E SEC. 30	03/05/92	33°23'N 90°14'W
MILLICAN, H.	LEFLORE	76	17.00	SEVEN PINE	SIDON	T18N R1E SEC. 31	03/05/92	33°23'N 90°14'W
ROBERTSON	LEFLORE	655	14.00	GREENWOOD	GREENWOOD	T20N R1E SEC. 24 & 25	10/02/90	33°34'N 90°08'W
SCOTT	LEFLORE	226	20.00	SUMNER	BROOKS	T22N R2W SEC. 8	09/01/94	33°47'N 90°25'W
SCOTT	LEFLORE	80	20.00	SUMNER	BROOKS	T22N R2W SEC. 3	09/01/94	33°48'N 90°23'W
SCOTT	LEFLORE	90	20.00	SUMNER	BROOKS	T22N R2W SEC. 9	09/01/94	33°47'N 90°24'W
SMITH, E.	MARSHALL	232	10.00	POTTS CAMP	MALONE	T6S R2W SEC. 28 & 29		34°37'N 89°25'W
WHALEY	MARSHALL	437	11.00	POTTS CAMP	BETHLEHEM	T6S R1W SEC. 6 & 7; T6S R2W SEC.1		34°35'N 89°21'W
BUTLER	QUITMAN	245		TUTWILER	LAMBERT	T27N R1W SEC. 11, 12 & 14	04/01/99	34°13'N 90°15'W
SAVAGE, E.	QUITMAN	59	10.00	TUTWILER	LAMBERT	T27N R1W SEC. 11	11/06/90	34°13'N 90°16'W
SAVAGE, P.	QUITMAN	40	13.00	CROWDER	CROWDER	T26N R1E SEC. 1	09/01/93	34°08'N 90°08'W
SAVAGE, P.	QUITMAN	20	13.00	CROWDER	CROWDER	T26N R1E SEC. 12	09/01/93	34°07'N 90°08'W
STARR, R.	QUITMAN	750	12.00	SLEDGE	CRENSHAW SOUTH	T8S R10W SEC. 1 & 2	06/02/91	34°25'N 90°13'W
STARR, R.	QUITMAN	320	12.00	SLEDGE	CRENSHAW SOUTH	T7S R10W SEC. 23	06/02/91	34°27'N 90°13'W
TRAINOR / BOYD	QUITMAN	382	11.00	TUTWILER	LAMBERT	T26N R1W SEC. 2 & 11	11/06/90	34°09'N 90°15'W
TRAINOR / BOYD	QUITMAN	219	11.00	CROWDER	CROWDER	T27N R1E SEC. 19& 20	11/06/90	34°12'N 90°14'W
TRAINOR / BOYD	QUITMAN	188	11.00	CROWDER	CROWDER	T27N R1E SEC. 20, 21 & 29	11/06/90	34°11'N 90°12'W
TRAINOR / BOYD	QUITMAN	228	11.00	TUTWILER	LAMBERT	T27N R1W SEC. 27	11/06/90	34°10'N 90°17'W
BOWLING	SUNFLOWER	170	14.00	BAIRD	MOOREHEAD	T19N R3W SEC. 29	12/06/91	33°29'N 90°31'W
LINDSEY, L.	SUNFLOWER	160	13.00	CLEVELAND	BOYER	T20N R4W SEC. 17	07/26/91	33°34'N 90°38'W
LINDSEY, L.	SUNFLOWER	40	13.00	CLEVELAND	RULEVILLE	T21N R4W SEC. 14	07/26/91	33°40'N 90°35'W
LINDSEY, L.	SUNFLOWER	204	13.00	CLEVELAND	RULEVILLE	T22N R4W SEC. 3	07/26/91	33°42'N 90°35'W
POVALL / KITCHENS	SUNFLOWER	180	11.00	BAIRD	MOOREHEAD	T19N R4W SEC. 25	11/06/90	33°27'N 90°33'W
POVALL / KITCHENS	SUNFLOWER	422	11.00	BAIRD	INVERNESS	T17N R4W SEC. 24 & 25	11/06/90	33°18'N 90°33'W
POVALL / KITCHENS	SUNFLOWER	80	11.00	BAIRD	INVERNESS	T17N R4W SEC. 13 & 18	11/06/90	33°19'N 90°33'W
WALKER	SUNFLOWER	42	10.00	CLEVELAND	CLEVELAND	T21N R4W SEC. 29	10/02/90	33°38'N 90°38'W
PATTERSON / WHITTEN	SUNFLOWER	46	15.00	SUMNER	ROME	T24N R3W SEC. 15 & 22	09/01/94	33°56'N 90°29'W
WILKINS	SUNFLOWER	1,204	12.00	SUMNER	ROME	T24N R3W SEC. 35 & 36; T23N R3W SEC. 1	05/02/91	33°54'N 90°22'W
CASTLEBERRY	TALLAHATCHIE	94	12.00	CROWDER	CROWDER	T26N R2E SEC. 7	11/01/93	34°07'N 90°07'W
JAMES	TALLAHATCHIE	160	10.00	PHILLIP	TIPPO	T24N R1E SEC. 36	10/11/90	33°54'N 90°08'W
PENNINGTON	TALLAHATCHIE	470	17.00	SUMNER	WEBB & VANCE	T25N R2W SEC.36		33°59'N 90°21'W
PENNINGTON	TALLAHATCHIE	360	17.00	TUTWILER	TUTWILER & VANCE	T25N R2W SEC. 26		34°00'N 90°22'W
PENNINGTON	TALLAHATCHIE	40	17.00	TUTWILER	VANCE	T25N R1W SEC. 2		34°03'N 90°15'W
FOOSHIE / SMITH	UNION	104	10.00	NEW ALBANY	NEW ALBANY WEST	T7S R2E SEC. 32 & 33	07/22/94	34°26'N 89°06'W
FOOSHIE / SMITH	UNION	134	10.00	NEW ALBANY	ETTA, NEW ALBANY WEST	T7S R2E SEC. 31 & 32	07/22/94	34°26'N 89°07'W
48 FEE TITLE PROPERTIES IN 8 COUNTIES		10,684	ACRES					

Table 1. Properties managed by North Mississippi Refuge Complex.

FmHA CONSERVATION EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
BELL / CRAB	ALCORN	40	10C	WALNUT	CHALYBEATE	T2S R5E SEC. 29	11/25/91	34°53'N 88°47'W
TURNER / TALLEY	ALCORN	8	11C	CORINTH	KUSSUTH NORTH	T1S R6E SEC. 35	02/22/95	34°57'N 88°37'W
BALDUCCI	BOLIVAR	12	19C	MOUND BAYOU	MOUND BAYOU	T24N R5W SEC. 6	10/13/95	33°58'N 90°45'W
BALDUCCI	BOLIVAR	12	19C	PACE	SHELBY	T24N R6W SEC. 1	10/13/95	33°58'N 90°46'W
BASS, B.H.	BOLIVAR	69	15C	PACE	SHELBY	T25N R6W SEC. 33	04/21/92	33°59'N 90°49'W
BASS, B.H.	BOLIVAR	277	15C	MELLWOOD	LACONIA, ROUND LAKE & SHELBY	T25N R7W SEC. 25 & 36	04/21/92	34°00'N 90°52'W
BASS, B.H.	BOLIVAR	723	15C	MELLWOOD	LACONIA & ROUND LAKE	T25N R7W SEC. 23 & 24	04/21/92	34°01'N 90°52'W
CLIFTON, R.	BOLIVAR	97	10C	CHOCTAW	LOBDELL	T21N R7W SEC. 28	12/18/89	33°08'N 90°55'W
HESTER, T. JR.	BOLIVAR	55		PACE	SHELBY	T25N R6W SEC. 34		33°59'N 90°48'W
HESTER, T. JR.	BOLIVAR	35		PACE	SHELBY	T25N R6W SEC. 34		33°59'N 90°48'W
McCLURE, J.	BOLIVAR	40		CLEVELAND	CLEVELAND	T21N R4W SEC. 26		33°47'N 90°43'W
McCLURE, J.	BOLIVAR	40		CLEVELAND	CLEVELAND	T21N R5W SEC. 33		33°38'N 90°41'W
CALHOUN / DANCE	CARROLL	149	10C	COILA	PEACHAHALA CREEK	T17N R5E SEC. 31 & 32		33°17'N 89°47'W
CALHOUN / DANCE	CARROLL	57	10C	COILA	PEACHAHALA CREEK	T16N R5E SEC. 6		33°16'N 89°43'W
CALHOUN / DANCE	CARROLL	16	10C	COILA	PEACHAHALA CREEK	T17N R5E SEC. 31		33°17'N 89°48'W
ALLEN	COAHOMA	4	11C	MARKS	LULA	T30N R3W SEC. 34		34°25'N 90°29'W
ALLEN	COAHOMA	52	11C	MARKS	LULA	T29N R3W SEC. 10 & 15		34°22'N 90°29'W
ALLEN	COAHOMA	31	11C	MARKS	LULA	T29N R3W SEC. 10 & 11		34°23'N 90°29'W
ALLEN	COAHOMA	30	11C	MARKS, FARRELL	LULA	T29N R3W SEC. 15		34°22'N 90°30'W
SAFLEY / BRADY	COAHOMA	13	10C	MOUND BAYOU	BALTZER	T25N R3W SEC. 32	02/26/90	33°59'N 90°31'W
STATEN	GRENADA	74	12C	PHILIPP	CASCILLA	T22N R2E SEC. 17 & 20		33°45'N 90°06'W
HARRIS, W.L.	GRENADA	18	10C	PHILIPP	CASCILLA	T22N R2E SEC. 10		33°46'N 90°04'W
MOOR, R.B.	LEFLORE	11	15C	GREENWOOD	GREENWOOD	T19N R1W SEC. 12	11/29/90	33°31'N 90°14'W
MOOR, R.B.	LEFLORE	77	15C	GREENWOOD & SCHLATER	GREENWOOD & SHELLMOUND	T19N R1W SEC. 12	11/29/90	33°31'N 90°15'W
MOOR, R.B.	LEFLORE	17	15C	SCHLATER	SHELLMOUND	T19N R1W SEC. 12	11/29/90	33°31'N 90°15'W
MOOR, R.B.	LEFLORE	58	15C	SCHLATER	GREENWOOD & SHELLMOUND	T19N R1W SEC. 13	11/29/90	33°30'N 90°15'W
TRIBBLE	LEFLORE	12		GREENWOOD	MONEY	T21N R1E SEC. 20		33°40'N 90°12'W
TRIBBLE	LEFLORE	28		GREENWOOD	MONEY	T21N R1E SEC. 20		33°40'N 90°13'W
HAWKINS	LEFLORE	33	12C	SCHLATER	BEAR CUT BAYOU	T20N R2W SEC. 34	09/20/90	33°33'N 90°23'W
KOLLE, R	LEFLORE	109	10C	SCHLATER	SHELL MOUND	T20N R2W SEC. 23	05/04/90	33°35'N 90°22'W
UPCHURCH / PRESTRIDGE	LEFLORE	250	11C	SCHLATER	BEAR CUT BAYOU	T20N R2W SEC. 22, 26 & 27	10/01/90	33°34'N 90°23'W
SAUNDERS	LEFLORE	15	13C	MOSSY LAKE & SCHLATER	COLONY TOWN	T19N R2W SEC. 20	07/09/90	33°30'N 90°25'W
SAUNDERS	LEFLORE	45	13C	MOSSY LAKE & SCHLATER	COLONY TOWN	T19N R2W SEC. 20	07/09/90	33°30'N 90°25'W
GRAHAM, T.	NEWTON	38	10C	not available	DECATUR	T6N R12E SEC. 3 & 4	06/08/92	32°23'N 89°03'W
TRAINOR, E. L.	QUITMAN	6	16C	CROWDER	CROWDER	T27N R1W SEC. 12 & 13	01/01/98	34°13'N 90°14'W
MOSES	SUNFLOWER	25			DREW	T22N R4W SEC. 1		
POWELL	SUNFLOWER	40	16C	CLEVELAND	RULEVILLE	T21N R4W SEC. 11		33°40'N 90°34'W
DAVIS, HIRAM	TALLAHATCHIE	17	13C	PHILIPP	MONEY	T22N R1E SEC. 29	02/15/90	33°44'N 90°12'W
DENMAN	TALLAHATCHIE	8	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°59'N 90°12'W
DENMAN	TALLAHATCHIE	6	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
DENMAN	TALLAHATCHIE	6	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
HARRIS, W.L.	TALLA., GRENA.	389	10C	PHILIPP	CASCILLA	T23N R2E SEC. 35 & 36;	04/28/89	33°48'N 90°03'W
HARRIS, W.L.	TALLAHATCHIE	40	10C	PHILIPP	CASCILLA	T23N R2E SEC. 34	04/28/89	33°48'N 90°04'W
MABUS	TALLAHATCHIE	42	16C	CROWDER	FISH HOOK LAKE	T25N R1E SEC. 26 & 27		34°00'N 90°10'W
MABUS	TALLAHATCHIE	416	16C	PHILLIP	PHILIPP & TIPPO	T24N R1E SEC. 36; T23N R1E SEC. 1 & 12		33°53'N 90°08'W
MABUS	TALLAHATCHIE	7	16C	PHILLIP	PHILIPP	T23N R1E SEC. 21		33°50'N 90°12'W
MACKEY / GASTON, J.	TALLAHATCHIE	81	11C	CROWDER & TUTWILER	CROWDER	T25N R1W SEC. 12	11/02/90	34°02'N 90°14'W
MILAM	TALLAHATCHIE	3		PHILIPP	TIPPO	T24N R1E SEC. 11	10/22/98	33°57'N 90°09'W
MILAM	TALLAHATCHIE	40		PHILIPP	TIPPO	T24N R1E SEC. 12	10/22/98	33°57'N 90°09'W
SHOOK	TALLAHATCHIE	35	15C	PHILIPP	PAYNES	T24N R2E SEC. 17	07/14/95	33°57'N 90°06'W
BENSON	UNION	76		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	1		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	2		NEW ALBANY	ETTA	T7S R1E SEC. 20 & 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	26		NEW ALBANY	ETTA	T7S R1E SEC. 17 & 20	07/01/99	34°28'N 89°13'W
BENSON	UNION	6		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
BENSON	UNION	2		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
HARRIS, W.L.	WEBS, CHOC.	515	10C	not available	EUPORA & SAPA	T19N R10E SEC. 9, 10 & 15	04/28/89	33°31'N 89°14'W
HOLLAND / BOONE	YALOBUSHA	37		GRENADA	SCOBIE	T25N R4W SEC.36		33°59'N 89°49'W
58 CONSERV. EASEMENTS IN 14 COUNTIES		4,368	ACRES					

FmHA FLOODPLAIN EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
HESTER, T. JR.	BOLIVAR	4		PACE	SHELBY	T24N R6W SEC. 3		33°59'N 90°48'W
STATEN	GRENADA	190	12C	PHILIPP	CASCILLA	T22N R2E SEC. 17 & 20	07/14/95	33°45'N 90°06'W
KOLLEE, R	LEFLORE	191	10C	SCHLATER	SHELL MOUND	T20N R2W SEC. 23	05/04/90	33°53'N 90°22'W
McCLATCHY	MARSHALL	124	12C	TYRO	MARIANNA	T4S R3W SEC. 22		34°43'N 89°30'W
DEARING / GIBBON	NEWTON	8	11C	not available	HERO	T5N R12W SEC. 32	11/13/90	32°14'N 89°05'W
TRAINOR, E. L.	QUITMAN	3		TUTWILER	LAMBERT	T27N R1W SEC. 13 & 14	01/01/98	34°12'N 90°15'W
TRAINOR, E. L.	QUITMAN	16		CROWDER & TUTWILER	CROWDER & LAMBERT	T27N R1W SEC. 13	01/01/98	34°12'N 90°15'W
POWELL	SUNFLOWER	1		CLEVELAND	RULEVILLE	T21N R4W SEC. 14		
POWELL	SUNFLOWER	7		CLEVELAND	RULEVILLE	T21N R4W SEC. 14		33°40'N 90°34'W
POWELL	SUNFLOWER	21		CLEVELAND	BOYER & SUNFLOWER	T20N R4W SEC. 32		33°31'N 90°37'W
POWELL	SUNFLOWER	24		CLEVELAND	BOYER	T19N R4W SEC. 5		33°31'N 90°37'W
DAVIS, HIRAM	TALLAHATCHIE	240	13C	PHILIPP	MONEY	T22N R1E SEC. 29		33°44'N 90°13'W
DENMAN	TALLAHATCHIE	77	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
MABUS	TALLAHATCHIE	429	16C	CROWDER	FISH HOOK LAKE	T25N R1E SEC. 25 & 26		34°00'N 90°09'W
MABUS	TALLAHATCHIE	168	16C	PHILIPP	PHILIPP	T23N R1E SEC. 20 & 21		33°50'N 90°12'W
MACKEY / GASTON, J.	TALLAHATCHIE	217	11C	CROWDER & TUTWILER	CROWDER & VANCE	T25N R1W SEC. 12	11/02/90	34°03'N 90°15'W
MILAM	TALLAHATCHIE	160		PHILIPP	TIPPO	T24N R1E SEC. 11 & 12	10/22/98	33°57'N 90°09'W
SHOOK	TALLAHATCHIE	160	15C	PHILIPP	PAYNES	T24N R2E SEC. 17	07/14/95	33°56'N 90°06'W
BENSON	UNION	43		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
BENSON	UNION	36		NEW ALBANY	ETTA	T7S R1E SEC. 20	07/01/99	34°27'N 89°13'W
BENSON	UNION	36		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°28'N 89°13'W
BENSON	UNION	13		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
22 FLOODPLAIN EASEMENTS IN 9 COUNTIES		2,167	ACRES					

The majority of the lands in the NMRC are within the Mississippi (River) Alluvial Valley (MAV) where topography is relatively flat and the soil consists of heavy clay hydric soils that have been subject to extensive clearing and drainage efforts. Originally, these lands were



Photo 2. Previous to Service ownership, several previous landowners suffered financial losses trying to farm the property now referred to as the Walker tract of Tallahatchie NWR. Restored in 1991 through a cooperative agreement among the Service, Ducks Unlimited, the Walker Foundation, and the National Fish and Wildlife Foundation, the Walker tract now overwinters thousands of migratory waterfowl and associated species. Photo by Ramsey Russell.

bottomland hardwood forests comprised of species such as bald cypress, water oak, Nuttall oak, overcup oak, water hickory, tupelo gum, red maple, sweet gum, cottonwood, black willow, and cane.

Since the NMRC was established in 1989 and assigned administrative responsibility for Dahomey, Tallahatchie, and Coldwater River NWRs, the thrust has been the creation, restoration, and enhancement of wetlands on public and private lands. Most of our work has been on properties managed by the Service, but oftentimes, we assist and work with diverse stakeholders such as the Mississippi Department of Wildlife, Fisheries and Parks (MDWFP), the Mississippi Department of Transportation (MDOT), Ducks Unlimited (DU, Photo 2), the Delta Wildlife Foundation, the U.S. Army Corps of Engineers (Corps), USDA Forest Service, private and corporate landowners, and a local K-12 school's efforts in providing an outdoor environmental classroom program. Projects with these agencies and organizations are usually done through "Partners Projects" and habitat management agreements. With few exceptions, NMRC's contributions on projects with these stakeholders consists of constructing earthen levees, installation of water control structures (WCS), and planting bottomland hardwood seedlings. The NMRC complex has grown rapidly, and provides habitat for large concentrations of wintering waterfowl and numerous species of neotropical migrants.

Dahomey National Wildlife Refuge

Dahomey NWR is located in Bolivar County, Mississippi in the west part of the NMRC near the Mississippi River (Figure 1 and 3). The Dahomey NWR work area contains 4,005 acres of fee title FmHA properties, 1,554 acres of conservation easements, and 56 acres of floodplain easements (Table 2). In 1990, The Nature Conservancy (TNC) purchased 9,269 acres from the Allen Gray Estate and leased the land back to the Service for management. In 1993, the Service completed acquisition of the TNC lands. One additional 162 acre tract was purchased by the MDOT and turned over to the Service in 1991. A 260-acre 16th section tract is leased from the West Bolivar School Board bringing the land base total to 9,691 acres.

Staffing and management of Dahomey began on a limited basis in 1991. Dahomey is presently staffed by Refuge Manager (RM) Jeff Lee and Biological Technician (BT) Kim Harrigan.

Dahomey consists of bottomland hardwood (8,348 acres), fallow field (537 acres), moist soil (275 acres), and agricultural field habitat (531 acres). Dahomey's 8,348 acres of woodlands is the largest contiguous tract of bottomland hardwood habitat occurring outside the Mississippi River main line levee in northwest Mississippi. Therefore, Dahomey's forest lands are extremely valuable to many forms of wildlife. The Lower Mississippi River Valley Joint Venture Team has identified Dahomey as being one of the top five priority sites for wintering waterfowl in the state of Mississippi.

The primary goal of the NMRC is to maintain, manage, enhance, and restore wetland values and functions of the alluvial habitats within Dahomey NWR. The primary habitat that historically occurred in the alluvial plain of the lower MAV were bottomland hardwoods. Historically, bottomland hardwoods extended hundreds of miles across this ecosystem. These expansive areas of bottomland hardwoods were subject to frequent periods of inundation. However, due to flood protection provided by levees and drainage projects most (80%) of this area in the lower MAV has been cleared and converted to primarily agricultural fields.

During the 40 year period prior to Service ownership, Dahomey's 8,348 acre hardwood forest was subject to fairly intensive timber harvesting. However, it was never cleared, but instead allowed to naturally regenerate. Dahomey's forest land is a relic of a habitat type that was once dominant throughout the lower MAV. Unfortunately, stream channelization and levee construction activities within and in the vicinity of Dahomey have reduced historical flooding regimes to the point that a significant portion of the habitat within Dahomey is no longer subject to periods of seasonal inundation. Therefore, one of the NMRC's objectives for Dahomey NWR is to restore and manage seasonal hydroperiods within its wetland habitat.

In 1994, the NMRC installed levees, pipes, and water control structures in two streams occurring within Dahomey NWR creating an approximately 700 acre greentree reservoir. During 1999, the

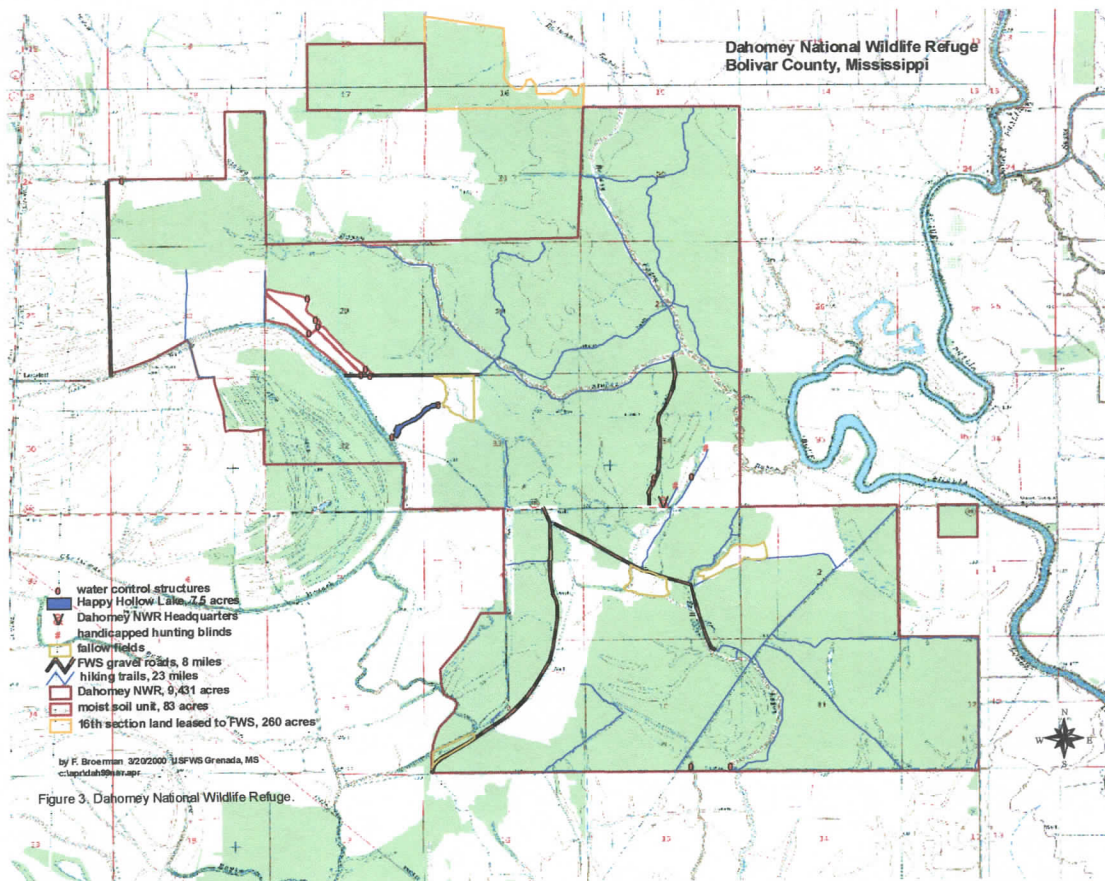


Figure 3. Dahomey National Wildlife Refuge.

NMRC converted an 85 acre agricultural field into a moist soil impoundment. NMRC also floods rice fields that are farmed by cooperative farmers. When these habitats are flooded during winter months, they provide quality habitat for thousands of migrating and wintering waterfowl (primarily mallards, gadwalls, American wigeon, and wood ducks).

The NMRC intends to further management efforts for waterfowl and other waterbirds by restoring and managing seasonal hydroperiods within more of Dahomey's habitats. For example, the NMRC is planning to develop additional greentree reservoirs, manage water levels in shrub swamps, and construct moist-soil impoundments within agricultural fields at Dahomey. The forest habitat management plan that was completed this year will provide the necessary mechanism for NMRC to manage forest habitat in a manner that will benefit forest interior neotropical migratory birds.

Table 2. Properties managed by Dahomey National Wildlife Refuge.

REFUGE PROPERTIES								
NAME	COUNTY	ACRES	ESTATE	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	YEAR ACQUIRED	LAT/LON
Dahomey NWR								
Allen Gray Estate/TNC	BOLIVAR	9,269	Fee Title	CHOCTAW, PACE	BEULAH, LOBDELL	T22N R7W SEC. 17, 19, 22 & 27-34; T21N R7W SEC. 1-4 & 9-12	1993.00	33°42'N 90°55'W
MS Dept of Trans. (DOT)	BOLIVAR	162	Fee Title	CHOCTAW	LOBDELL	T22N R7W SEC. 34	1991.00	33°42'N 90°54'W
West Bolivar Co. School Board	BOLIVAR	260	Lease	CHOCTAW, PACE	BEULAH, LOBDELL	T22N R7W SEC. 16	N/A	33°45'N 90°09'W
DAHOMNEY NWR		TOTAL ACRES	9,691					

FmHA FEE TITLE PROPERTIES								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
CARMICLIE	BOLIVAR	40	14.00	PACE	SHELBY	T24N R6W SEC. 26	07/26/91	33°54'N 90°47'W
GOSS	BOLIVAR	543	17.00	MELLWOOD	ROUND LAKE	T26N R6W SEC. 35 & 36; T25N R6W SEC. 2	07/14/94	34°05'N 90°47'W
HESTER, T. III	BOLIVAR	389	13.00	PACE	PACE	T23N R6W SEC. 1	07/26/91	33°52'N 90°46'W
HOLCOMB, D.	BOLIVAR	40	12.00	CLARKSDALE	DUNCAN	T25N R5W SEC. 13	07/26/91	34°02'N 90°40'W
RAY	BOLIVAR	50	18.00	PACE	SHELBY	T25N R6W SEC. 33	09/27/94	33°59'N 90°49'W
RILEY	BOLIVAR	100	11.00	MOUND BAYOU	MERIGOLD	T23N R5W SEC. 13	07/26/91	33°50'N 90°40'W
WATTS, J.	BOLIVAR	214	16.00	MELLWOOD	ROUND LAKE	T25N R6W SEC. 4	07/31/92	34°04'N 90°50'W
WATTS, J.	BOLIVAR	81	16.00	MELLWOOD	ROUND LAKE	T26N R6W SEC. 33	07/31/92	34°04'N 90°49'W
BOWLING	SUNFLOWER	170	14.00	BAIRD	MOOREHEAD	T19N R3W SEC. 29	12/06/91	33°29'N 90°31'W
LINDSEY, L.	SUNFLOWER	160	13.00	CLEVELAND	BOYER	T20N R4W SEC. 17	07/26/91	33°34'N 90°38'W
LINDSEY, L.	SUNFLOWER	40	13.00	CLEVELAND	RULEVILLE	T21N R4W SEC. 14	07/26/91	33°40'N 90°35'W
LINDSEY, L.	SUNFLOWER	204	13.00	CLEVELAND	RULEVILLE	T22N R4W SEC. 3	07/26/91	33°42'N 90°35'W
POVALL / KITCHENS	SUNFLOWER	180	11.00	BAIRD	MOOREHEAD	T19N R4W SEC. 25	11/06/90	33°27'N 90°33'W
POVALL / KITCHENS	SUNFLOWER	422	11.00	BAIRD	INVERNESS	T17N R4W SEC. 24 & 25	11/06/90	33°18'N 90°33'W
POVALL / KITCHENS	SUNFLOWER	80	11.00	BAIRD	INVERNESS	T17N R4W SEC. 13 & 18	11/06/90	33°19'N 90°33'W
WALKER	SUNFLOWER	42	10.00	CLEVELAND	CLEVELAND	T21N R4W SEC. 29	10/02/90	33°38'N 90°38'W
PATTERSON / WHITTEN	SUNFLOWER	46	15.00	SUMNER	ROME	T24N R3W SEC. 15 & 22	09/01/94	33°56'N 90°29'W
WILKINS	SUNFLOWER	1,204	12.00	SUMNER	ROME	T24N R3W SEC. 35 & 36; T23N R3W SEC. 1	05/02/91	33°54'N 90°22'W
18 FEE TITLE PROPERTIES IN 2 COUNTIES		4,005	ACRES					

FmHA CONSERVATION EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
BALDUCCI	BOLIVAR	12	19C	MOUND BAYOU	MOUND BAYOU	T24N R5W SEC. 6	10/13/95	33°58'N 90°45'W
BALDUCCI	BOLIVAR	12	19C	PACE	SHELBY	T24N R6W SEC. 1	10/13/95	33°58'N 90°46'W
BASS, B.H.	BOLIVAR	69	15C	PACE	SHELBY	T25N R6W SEC. 33	04/21/92	33°59'N 90°49'W
BASS, B.H.	BOLIVAR	277	15C	MELLWOOD	LACONIA, ROUND LAKE & SHELBY	T25N R7W SEC. 25 & 36	04/21/92	34°00'N 90°52'W
BASS, B.H.	BOLIVAR	723	15C	MELLWOOD	LACONIA & ROUND LAKE	T25N R7W SEC. 23 & 24	04/21/92	34°01'N 90°52'W
CLIFTON, R.	BOLIVAR	97	10C	CHOCTAW	LOBDELL	T21N R7W SEC. 28	12/18/89	33°08'N 90°55'W
HESTER, T. JR.	BOLIVAR	55		PACE	SHELBY	T25N R6W SEC. 34		33°59'N 90°48'W
HESTER, T. JR.	BOLIVAR	35		PACE	SHELBY	T25N R6W SEC. 34		33°59'N 90°48'W
McCLURE, J.	BOLIVAR	40		CLEVELAND	CLEVELAND	T21N R4W SEC. 26		33°47'N 90°43'W
McCLURE, J.	BOLIVAR	40		CLEVELAND	CLEVELAND	T21N R5W SEC. 33		33°38'N 90°41'W
ALLEN	COAHOMA	4	11C	MARKS	LULA	T30N R3W SEC. 34		34°25'N 90°29'W
ALLEN	COAHOMA	52	11C	MARKS	LULA	T29N R3W SEC. 10 & 15		34°22'N 90°29'W
ALLEN	COAHOMA	31	11C	MARKS	LULA	T29N R3W SEC. 10 & 11		34°23'N 90°29'W
ALLEN	COAHOMA	30	11C	MARKS, FARRELL	LULA	T29N R3W SEC. 15		34°22'N 90°30'W
SAFLEY / BRADY	COAHOMA	13	10C	MOUND BAYOU	BALTZER	T25N R3W SEC. 32	02/26/90	33°59'N 90°31'W
MOSES	SUNFLOWER	25			DREW	T22N R4W SEC. 1		
POWELL	SUNFLOWER	40	16C	CLEVELAND	RULEVILLE	T21N R4W SEC. 11		33°40'N 90°34'W
17 CONSERV. EASEMENTS IN 3 COUNTIES		1,564	ACRES					

FmHA FLOODPLAIN EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
HESTER, T. JR.	BOLIVAR	4		PACE	SHELBY	T24N R6W SEC. 3		33°59'N 90°48'W
POWELL	SUNFLOWER	1		CLEVELAND	RULEVILLE	T21N R4W SEC. 14		
POWELL	SUNFLOWER	7		CLEVELAND	RULEVILLE	T21N R4W SEC. 14		33°40'N 90°34'W
POWELL	SUNFLOWER	21		CLEVELAND	BOYER & SUNFLOWER	T20N R4W SEC. 32		33°31'N 90°37'W
POWELL	SUNFLOWER	24		CLEVELAND	BOYER	T19N R4W SEC. 5		33°31'N 90°37'W
5 FLOODPLAIN EASEMENTS IN 2 COUNTIES		57	ACRES					

01/03/02

Dahomey NWR has had a hunting program since 1993. Numerous sportsmen participate in deer, turkey, squirrel, and rabbit hunts at Dahomey. Several trophy quality white-tail deer have been harvested at Dahomey. Due to this, Dahomey has developed a reputation for having quality deer and become a favorite hunting place for many deer hunters. During 1998, for the first time, the NMRC established a waterfowl hunting season at Dahomey.



Photo 3. Prothonotary warbler's are abundant in the woodlands of Dahomey NWR during the summer, particularly near ephemeral pools of water. Photo by Ramsey Russell.

There has been a substantial amount of participation in waterfowl hunting opportunities at Dahomey. Dahomey was open to waterfowl hunting again this year and the NMRC intends to continue providing duck hunting opportunities in future years.

Dahomey's 8,348 acre bottomland hardwood forest provides important habitat for numerous species of neotropical migratory birds such as Mississippi kite, summer tanager, ruby-throated hummingbird, wood thrush, hermit thrush, yellow-billed cuckoo, blue-gray gnatcatcher, great-crested flycatcher, eastern wood-pewee, Acadian flycatcher, hooded warbler, prothonotary warbler, Swainson's warbler, white-eyed vireo, and red-eyed vireo (Photo 3). Dahomey has been identified by Partners in Flight as a priority area in the lower MAV for rare or declining neotropical migratory birds. As such, Dahomey is a landmark for bird watchers.

Flocks of twenty or more wild turkeys are seen regularly during the fall and winter on Dahomey NWR. In the winter, six species of woodpeckers can be seen along with barred, great horned, screech, and short-eared owls.

Dahomey NWR is truly an island of forested wetlands in a sea of agricultural lands and represents a vestige of natural habitats in the northwestern part of the Mississippi.

Tallahatchie National Wildlife Refuge

Until 2000, **Tallahatchie NWR** consisted of the Bear Lake and Black Bayou Units . In 2000, these two units were officially separated into two individual refuges. The former Bear Lake Unit retained the name of Tallahatchie . The former Black Bayou Unit is now Coldwater River NWR.

The **Tallahatchie NWR** (Photo 4) is a patchwork of cultivated farmlands, old fields, and small scattered tracts of bottomland hardwood forest bisected by the meandering Tippo Bayou which is its center piece (Figure 4). The refuge work area consists of 4,083 acres of fee title properties, 544 acres of conservation easements and 190 acres of floodplain easements (Figures 1 and 2, Table 3). The old oxbows and low-lying fields along Tippo Bayou flood each winter and hold large concentrations of waterfowl. The unit also supports a healthy deer herd. Wood ducks, eastern screech owl, barred owl, great-horned owl, loggerhead shrikes, and red-tailed hawks are common year-round residents. Blue grosbeaks, dickcissels, and painted buntings can be seen during the summer. Most of the agriculture land (628 acres) is devoted to soybeans, corn, and rice.

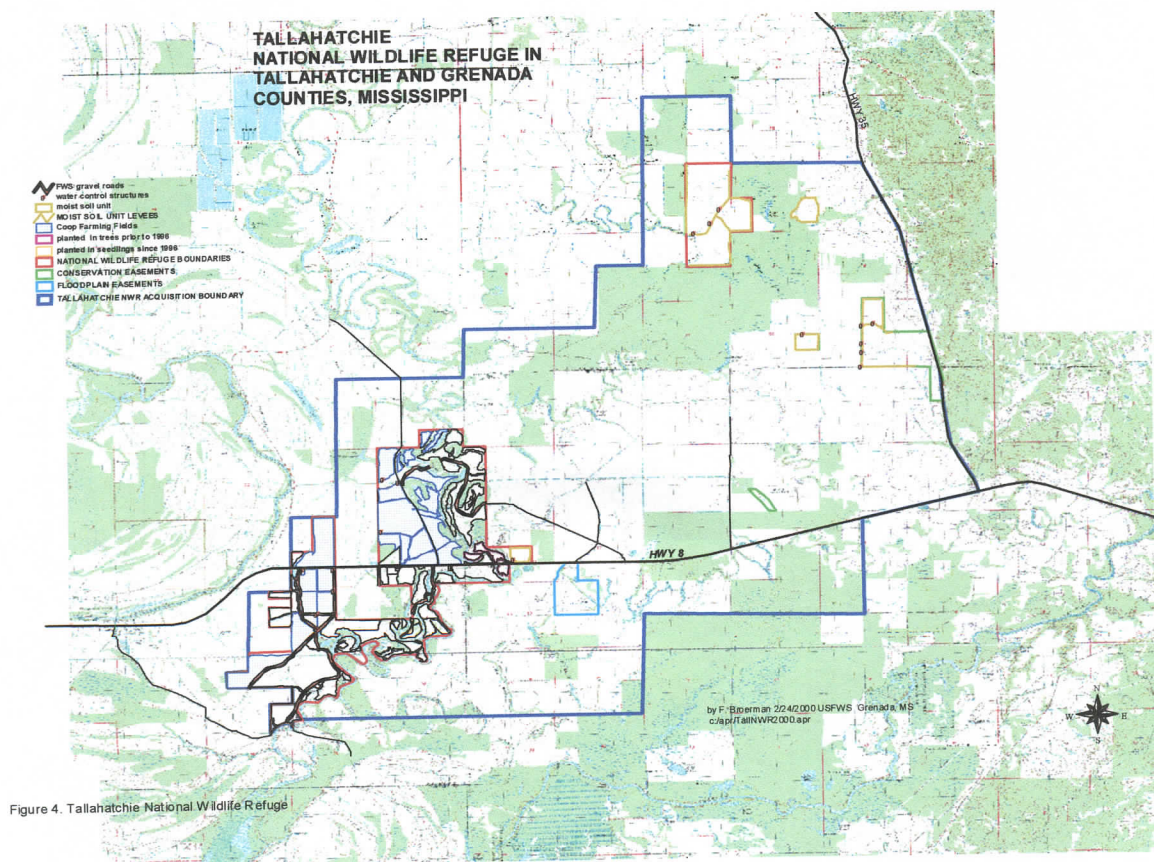


Figure 4. Tallahatchie National Wildlife Refuge

Table 3. Properties managed by Tallahatchie National Wildlife Refuge.

REFUGE PROPERTIES								
NAME	COUNTY	ACRES	ESTATE	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	YEAR ACQUIRED	LAT/LON
TALLAHATCHIE NWR								
Walker Tract	TALLAHATCHIE	557	Fee Title	PHILIPP	CASCILLA	T23N R2E SEC. 21, 22 & 28	1991.00	30°50'N 90°05'W
John Whitten	GRENADA, TALLAHATCHIE	509	Fee Title	PHILIPP	PHILIPP	T22N R1E SEC.13 & 24; T22N R2E SEC. 18	1992.00	33°45'N 90°08'W
John Hancock	GRENADA, TALLAHATCHIE	1,361	Fee Title	PHILIPP	PHILIPP	T22N R1E SEC. 1, 12 & 13; T22N R2E SEC. 7 & 18	1992.00	33°47'N 90°08'W
Chicago Mills/DOT	TALLAHATCHIE	1,656	Fee Title	GREENWOOD, PHILIPP	MONEY, PHILIPP	T22N R1E SEC. 14, 22-27 & 34	1997.00	33°45'N 90°09'W
		TOTAL ACRES (Fee Title only)		4,083				

FmHA FEE TITLE PROPERTIES								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
GILLON	GRENADA	245	11.00	GRENADA	GRENADA	T22N R5E SEC. 21	07/14/93	33°45'N 89°46'W
GWIN	LEFLORE	343	18.00	SUMNER	GLENDORA	T22N R2W SEC. 13 & 24	02/19/92	33°45'N 90°21'W
HENSON	LEFLORE	165	19.00	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 19	07/15/92	33°19'N 90°20'W
HENSON / A.C.O.E.	LEFLORE	275	no	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 19	?	33°19'N 90°20'W
KIMBROUGH, A.M.	LEFLORE	40	18.00	MOSSY LAKE	MONTGOMERY	T17N R1W SEC. 18	04/18/92	33°19'N 90°20'W
MILLIGAN, H.	LEFLORE	2	17.00	SEVEN PINE	SIDON	T18N R1E SEC. 30	03/05/92	33°23'N 90°14'W
MILLIGAN, H.	LEFLORE	76	17.00	SEVEN PINE	SIDON	T18N R1E SEC. 31	03/05/92	33°23'N 90°14'W
ROBERTSON	LEFLORE	655	14.00	GREENWOOD	GREENWOOD	T20N R1E SEC. 24 & 25	10/02/90	33°34'N 90°08'W
SCOTT	LEFLORE	226	20.00	SUMNER	BROOKS	T22N R2W SEC. 8	09/01/94	33°47'N 90°25'W
SCOTT	LEFLORE	80	20.00	SUMNER	BROOKS	T22N R2W SEC. 3	09/01/94	33°47'N 90°24'W
SCOTT	LEFLORE	90	20.00	SUMNER	BROOKS	T22N R2W SEC. 9	09/01/94	33°47'N 90°24'W
CASTLEBERRY	TALLAHATCHIE	94	12.00	CROWDER	CROWDER	T26N R2E SEC. 7	11/01/93	34°07'N 90°07'W
JAMES	TALLAHATCHIE	160	10.00	PHILLIP	TIPPO	T24N R1E SEC. 36	10/11/90	33°54'N 90°08'W
PENNINGTON	TALLAHATCHIE	470	17.00	SUMNER	WEBB & VANCE	T25N R2W SEC.36		33°59'N 90°21'W
PENNINGTON	TALLAHATCHIE	360	17.00	TUTWILER	TUTWILER & VANCE	T25N R2W SEC. 26		34°00'N 90°22'W
PENNINGTON	TALLAHATCHIE	40	17.00	TUTWILER	VANCE	T25N R1W SEC. 2		34°03'N 90°15'W
		16 FEE TITLE PROPERTIES IN 3 COUNTIES		385,159 ACRES				

FmHA CONSERVATION EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
CALHOUN / DANCE	CARROLL	149	10C	COILA	PEACHAHALA CREEK	T17N R5E SEC. 31 & 32		33°17'N 89°47'W
CALHOUN / DANCE	CARROLL	57	10C	COILA	PEACHAHALA CREEK	T16N R5E SEC. 6		33°16'N 89°48'W
CALHOUN / DANCE	CARROLL	16	10C	COILA	PEACHAHALA CREEK	T17N R5E SEC. 31		33°17'N 89°48'W
STATEN	GRENADA	74	12C	PHILIPP	CASCILLA	T22N R2E SEC. 17 & 20		33°45'N 90°06'W
HARRIS, W.L.	GRENADA	18	10C	PHILIPP	CASCILLA	T22N R2E SEC. 10		33°46'N 90°04'W
MOOR, R.B.	LEFLORE	11	15C	GREENWOOD	GREENWOOD	T19N R1W SEC. 12	11/29/90	33°31'N 90°14'W
MOOR, R.B.	LEFLORE	77	15C	GREENWOOD & SCHLATER	GREENWOOD & SHELLMOUND	T19N R1W SEC. 12	11/29/90	33°31'N 90°15'W
MOOR, R.B.	LEFLORE	17	15C	SCHLATER	SHELLMOUND	T19N R1W SEC. 12	11/29/90	33°31'N 90°15'W
MOOR, R.B.	LEFLORE	58	15C	SCHLATER	GREENWOOD & SHELLMOUND	T19N R1W SEC. 13	11/29/90	33°30'N 90°15'W
TRIBBLE	LEFLORE	12		GREENWOOD	MONEY	T21N R1E SEC. 20		33°40'N 90°12'W
TRIBBLE	LEFLORE	28		GREENWOOD	MONEY	T21N R1E SEC. 20		33°40'N 90°13'W
HAWKINS	LEFLORE	33	12C	SCHLATER	BEAR CUT BAYOU	T20N R2W SEC. 34	09/20/90	33°33'N 90°23'W
KOLLE, R	LEFLORE	109	10C	SCHLATER	SHELL MOUND	T20N R2W SEC. 23	05/04/90	33°35'N 90°22'W
UPCHURCH / PRESTRIDGE	LEFLORE	250	11C	SCHLATER	BEAR CUT BAYOU	T20N R2W SEC. 22, 26 & 27	10/01/90	33°34'N 90°23'W
SAUNDERS	LEFLORE	15	13C	MOSSY LAKE & SCHLATER	COLONY TOWN	T19N R2W SEC. 20	07/09/90	33°30'N 90°25'W
SAUNDERS	LEFLORE	45	13C	MOSSY LAKE & SCHLATER	COLONY TOWN	T19N R2W SEC. 20	07/09/90	33°30'N 90°25'W
GRAHAM, T.	NEWTON	38	10C	not available	DECATUR	T6N R12E SEC. 3 & 4	06/08/92	32°23'N 89°03'W
DAVIS, HIRAM	TALLAHATCHIE	17	13C	PHILIPP	MONEY	T22N R1E SEC. 29	02/15/90	33°44'N 90°12'W
DENMAN	TALLAHATCHIE	8	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°59'N 90°12'W
DENMAN	TALLAHATCHIE	6	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
DENMAN	TALLAHATCHIE	6	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
HARRIS, W.L.	TALLA, GRENA.	389	10C	PHILIPP	CASCILLA	T23N R2E SEC. 35 & 36; T22N R2E SEC. 1	04/28/89	33°48'N 90°03'W
HARRIS, W.L.	TALLAHATCHIE	40	10C	PHILIPP	CASCILLA	T23N R2E SEC. 34	04/28/89	33°48'N 90°04'W
MABUS	TALLAHATCHIE	42	16C	CROWDER	FISH HOOK LAKE	T25N R1E SEC. 26 & 27		34°00'N 90°10'W
MABUS	TALLAHATCHIE	416	16C	PHILIPP	PHILIPP & TIPPO	T24N R1E SEC. 36; T23N R1E SEC. 1 & 12		33°53'N 90°08'W
MABUS	TALLAHATCHIE	7	16C	PHILIPP	PHILIPP	T23N R1E SEC. 21		33°50'N 90°12'W
MACKEY / GASTON, J.	TALLAHATCHIE	81	11C	CROWDER & TUTWILER	CROWDER	T25N R1W SEC. 12	11/02/90	34°02'N 90°14'W
MILAM	TALLAHATCHIE	3		PHILIPP	TIPPO	T24N R1E SEC. 11	10/22/98	33°57'N 90°09'W
MILAM	TALLAHATCHIE	40		PHILIPP	TIPPO	T24N R1E SEC. 12	10/22/98	33°57'N 90°09'W
SHOOK	TALLAHATCHIE	35	15C	PHILIPP	PAYNES	T24N R2E SEC. 17	07/14/95	33°57'N 90°06'W
HARRIS, W.L.	WEBS, CHOC.	515	10C	not available	EUPORA & SAPA	T19N R10E SEC. 9, 10 & 15	04/28/89	33°31'N 89°14'W
HOLLAND / BOONE	YALOBUSHA	37		GRENADA	SCOBIE	T25N R4W SEC.36		33°59'N 89°49'W
		32 CONSERV. EASEMENTS IN 8 COUNTIES		2,649 ACRES				

FmHA FLOODPLAIN EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
STATEN	GRENADA	190	12C	PHILIPP	CASCILLA	T22N R2E SEC. 17 & 20	07/14/95	33°45'N 90°06'W
KOLLEE, R	LEFLORE	191	10C	SCHLATER	SHELL MOUND	T20N R2W SEC. 23	05/04/90	33°53'N 90°22'W
DEARING / GIBBON	NEWTON	8	11C	not available	HERO	T5N R12W SEC. 32	11/13/90	32°14'N 89°05'W
DAVIS, HIRAM	TALLAHATCHIE	240	13C	PHILIPP	MONEY	T22N R1E SEC. 29		33°44'N 90°13'W
DENMAN	TALLAHATCHIE	77	14C	PHILIPP	TIPPO	T24N R1E SEC. 5		33°58'N 90°12'W
MABUS	TALLAHATCHIE	429	16C	CROWDER	FISH HOOK LAKE	T25N R1E SEC. 25 & 26		34°00'N 90°09'W
MABUS	TALLAHATCHIE	168	16C	PHILIPP	PHILIPP	T23N R1E SEC. 20 & 21		33°50'N 90°12'W
MACKEY / GASTON, J.	TALLAHATCHIE	217	11C	CROWDER & TUTWILER	CROWDER & VANCE	T25N R1W SEC. 12	11/02/90	34°03'N 90°15'W
MILAM	TALLAHATCHIE	160		PHILIPP	TIPPO	T24N R1E SEC. 11 & 12	10/22/98	33°57'N 90°09'W
SHOOK	TALLAHATCHIE	160	15C	PHILIPP	PAYNES	T24N R2E SEC. 17	07/14/95	33°56'N 90°06'W
		10 FLOODPLAIN EASEMENTS IN 4 COUNTIES		1,840 ACRES				

01/03/02

Just south of the refuge lies the 9,483 acre Malmaison Wildlife Management Area which is managed by MDWFP.

When these refuge lands were originally acquired by the Service, agriculture production was the primary land use. In 2001, only 15% of the refuge was in agriculture production. Twenty-five percent of the crops produced were left on the ground for wildlife through the Service's Cooperative farming program. Most of the refuge has been reforested through planting efforts by NMRC staff.

Tallahatchie NWR has a popular hunting program. Hunters pursue large-antlered white-tailed deer, squirrels, rabbits, ducks, and feral hogs. Youth hunts for both deer and waterfowl are heavily promoted on the refuge. The landing on Tippo Bayou provides boat access to hunters and fishermen alike.



Photo 4. Nearly two-thirds of Tallahatchie NWR consists of forested wetlands restored during the past 5 years. Consequently, wildlife species that prefer early succession habitat, such as this Dickcissel, are common on the refuge. Photo by Ramsey Russell.

COLDWATER RIVER NATIONAL WILDLIFE REFUGE

Coldwater River NWR, formerly the Black Bayou Unit of Tallahatchie NWR, consists of 2,069 acres of fee title lands (Figure 5). Over half of this acreage is abandoned old fields of low, poorly-drained soils which flood most winters. There are 3,452 acres of fee title FmHA properties, 165 acres of conservation easements, and 271 acres of floodplain easements in the Coldwater River NWR work area (Figure 1 and Table 4). Several hundred acres have been reforested with hardwoods, but due to the wet nature of the area, willow and button bush thickets now dominate many acres. This area holds thousands of mallards during annual winter flooding. No cooperative farming was used on Coldwater River NWR during 2001.

A 495-acre portion of Coldwater River NWR contains twenty-five ponds that were previously managed as a commercial catfish operation (Photo 5). These ponds range in size from 9 to 21 acres, and are now managed for shorebirds, ducks, and wading birds.

Thirty-four species of shorebirds have been recorded here. Fifteen of these are commonly seen at the ponds from March - June and from July - October.

Peregrine falcon, least tern, black tern, and wood stork occasionally pass through the refuge in migration. Bald eagles and red-tail hawks are seen regularly in winter and occasionally a golden eagle is seen (Photo 6). Marsh birds such as sedge wren, marsh wren, common yellowthroat, swamp sparrow, sora, and king rail are regularly seen or heard at Coldwater River NWR.

American bittern, least bittern, Lincoln's sparrow, LeConte's sparrow, and Virginia rail are seen less commonly.

Beaver, bobcat, coyote and mink occur on the refuge. Mississippi kites, dickcissels, warbling vireos, and painted buntings can be seen on the refuge during the summer. During the summer it is not uncommon to see a couple hundred egrets, ibis, and herons feeding in the ponds. Other waders such as snowy egrets, little blue herons, black-crowned night-heron, yellow-crowned night-heron, white ibis, and tricolored heron are occasionally seen. In the evenings during August and September large flocks of wading birds, after having spent the day foraging at scattered locations in the vicinity, can be seen flying into roost in those ponds which are filled with willow. Least flycatchers nested here during the summers of 1996 and 1997. This is the only location where this species is known to nest in Mississippi.



Photo 5. Aerial view of the old catfish ponds at Coldwater River NWR. Photo by Ramsey Russell.

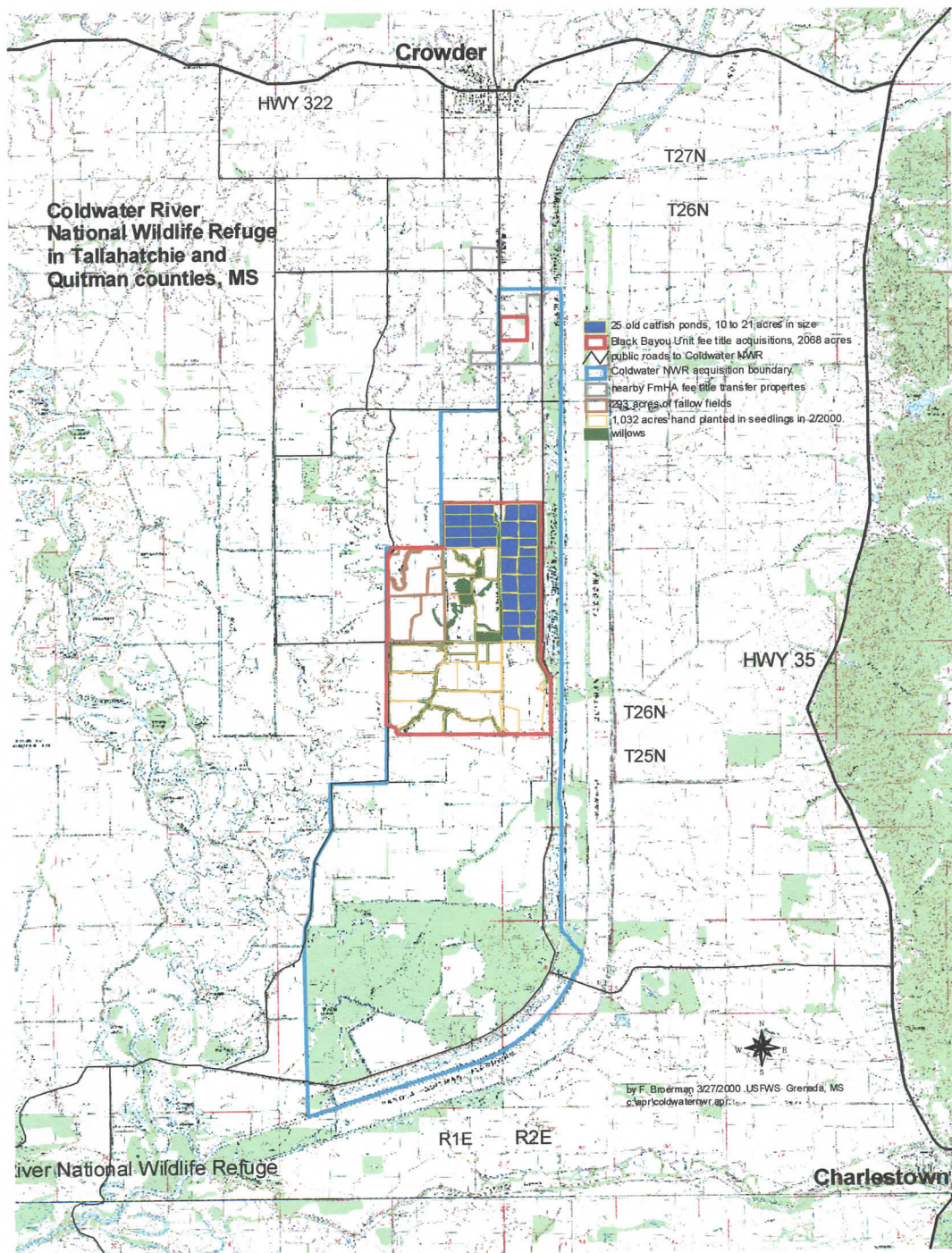


Figure 5. Coldwater River National Wildlife Refuge.

The twenty-five ponds and nearby low-lying fallow fields of the refuge have a history of

attracting large concentrations of waterfowl in the winter. The refuge provides a juxtaposition of habitats not commonly found in the lower MAV. Coldwater River's mix of habitats and its proximity to the migration corridors of the Little Coldwater River and the Panola-Quitman Floodway attract a high diversity of migrant waterbirds all year round. Coldwater River NWR is currently staffed with a Refuge Manager.



Photo 6. A red-tail hawk as it feasts on a cotton rat at Coldwater River NWR. There is an abundance of rodent forage available to raptors in the recently restored forest wetlands at the refuge. Photo by Ramsey Russell

Table 4. Properties managed by Coldwater River National Wildlife Refuge.

REFUGE PROPERTIES								
NAME	COUNTY	ACRES	ESTATE	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	YEAR ACQUIRED	LAT/LON
COLDWATER RIVER NWR								
Travelers Insurance	QUITMAN, TALLAHATCHIE	1,730	Fee Title	CROWDER	FISH HOOK LAKE	T26N R2E SEC. 30 & 31; T26N R1E SEC. 25 & 36	1991.00	34°5'N 90°08'W
Shiele Tract	TALLAHATCHIE	40	Fee Title	CROWDER	CROWDER	T26N R2E SEC. 7	1996.00	34°8'N 90°08'W
Duck Ponds Inc.	QUITMAN, TALLAHATCHIE	298	Fee Title	CROWDER	FISH HOOK LAKE	T26N R2E SEC. 19; T26N R1E SEC. 24	1996.00	34°6'N 90°08'W
COLDWATER RIVER NWR TOTAL ACRES		2,068						

FmHA FEE TITLE PROPERTIES								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
SMITH, E.	MARSHALL	232	10.00	POTTS CAMP	MALONE	T5S R2W SEC. 28 & 29		34°37'N 89°25'W
WHALEY	MARSHALL	437	11.00	POTTS CAMP	BETHLEHEM	T6S R1W SEC. 6 & 7; T6S R2W SEC. 1		34°35'N 89°21'W
BUTLER	QUITMAN	245		TUTWILER	LAMBERT	T27N R1W SEC. 11, 12 & 14	04/01/99	34°13'N 90°15'W
SAVAGE, E.	QUITMAN	59	10.00	TUTWILER	LAMBERT	T27N R1W SEC. 11	11/06/90	34°13'N 90°16'W
SAVAGE, P.	QUITMAN	40	13.00	CROWDER	CROWDER	T26N R1E SEC. 1	09/01/93	34°08'N 90°08'W
SAVAGE, P.	QUITMAN	20	13.00	CROWDER	CROWDER	T26N R1E SEC. 12	09/01/93	34°07'N 90°08'W
STARR, R.	QUITMAN	750	12.00	SLEDGE	CRENSHAW SOUTH	T8S R10W SEC. 1 & 2	06/02/91	34°25'N 90°13'W
STARR, R.	QUITMAN	320	12.00	SLEDGE	CRENSHAW SOUTH	T7S R10W SEC. 23	06/02/91	34°27'N 90°13'W
TRAINOR / BOYD	QUITMAN	382	11.00	TUTWILER	LAMBERT	T26N R1W SEC. 2 & 11	11/06/90	34°09'N 90°15'W
TRAINOR / BOYD	QUITMAN	219	11.00	CROWDER	CROWDER	T27N R1E SEC. 19 & 20	11/06/90	34°12'N 90°14'W
TRAINOR / BOYD	QUITMAN	188	11.00	CROWDER	CROWDER	T27N R1E SEC. 20, 21 & 29	11/06/90	34°11'N 90°12'W
TRAINOR / BOYD	QUITMAN	228	11.00	TUTWILER	LAMBERT	T27N R1W SEC. 27	11/06/90	34°10'N 90°17'W
FOOSHIE / SMITH	UNION	104	10.00	NEW ALBANY	NEW ALBANY WEST	T7S R2E SEC. 32 & 33	07/22/94	34°26'N 89°06'W
FOOSHIE / SMITH	UNION	134	10.00	NEW ALBANY	ETTA, NEW ALBANY WEST	T7S R2E SEC. 31 & 32	07/22/94	34°26'N 89°07'W
14 FEE TITLE PROPERTIES IN 3 COUNTIES		3,358	ACRES					

FmHA CONSERVATION EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
BELL / CRAB	ALCORN	40	10C	WALNUT	CHALYBEATE	T2S R5E SEC. 29	11/25/91	34°53'N 88°47'W
TURNER / TALLEY	ALCORN	8	11C	CORINTH	KUSSUTH NORTH	T1S R6E SEC. 35	02/22/95	34°57'N 88°37'W
TRAINOR, E. L.	QUITMAN	6	16C	CROWDER	CROWDER	T27N R1W SEC. 12 & 13	01/01/98	34°13'N 90°14'W
BENSON	UNION	76		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	1		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	2		NEW ALBANY	ETTA	T7S R1E SEC. 20 & 21	07/01/99	34°27'N 89°12'W
BENSON	UNION	26		NEW ALBANY	ETTA	T7S R1E SEC. 17 & 20	07/01/99	34°28'N 89°13'W
BENSON	UNION	6		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
BENSON	UNION	2		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
9 CONSERV. EASEMENTS IN 3 COUNTIES		165	ACRES					

FmHA FLOODPLAIN EASEMENTS								
NAME	COUNTY	ACRES	Tract #	15' QUAD	7.5' QUAD	LEGAL DESCRIPTION	DATE ACQUIRED	LAT/LON
McCLATCHY	MARSHALL	124	12C	TYRO	MARIANNA	T4S R3W SEC. 22		34°43'N 89°30'W
TRAINOR, E. L.	QUITMAN	3		TUTWILER	LAMBERT	T27N R1W SEC. 13 & 14	01/01/98	34°12'N 90°15'W
TRAINOR, E. L.	QUITMAN	16		CROWDER & TUTWILER	CROWDER & LAMBERT	T27N R1W SEC. 13	01/01/98	34°12'N 90°15'W
BENSON	UNION	43		NEW ALBANY	ETTA	T7S R1E SEC. 17	07/01/99	34°28'N 89°12'W
BENSON	UNION	36		NEW ALBANY	ETTA	T7S R1E SEC. 20	07/01/99	34°27'N 89°13'W
BENSON	UNION	36		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°28'N 89°13'W
BENSON	UNION	13		NEW ALBANY	ETTA	T7S R1E SEC. 21	07/01/99	34°27'N 89°12'W
7 FLOODPLAIN EASEMENTS IN 3 COUNTIES		271	ACRES					

01/03/02

HIGHLIGHTS

- Refuge Manager Russell conducted aerial waterfowl surveys of North Mississippi Refuge lands this past year. Peak flight estimates occurred on January 10 but were significantly lower than for past years. On January 10, waterfowl observed totaled 31,559, not nearly as high as last years highest survey estimate which recorded 49,324 on January 25. By late January, numbers of waterfowl observed on NMRC properties had dwindled to 12,194, due to a prolonged period of sub-freezing temperatures which kept water frozen throughout the entire delta region. (1a)
- Biologist Woods conducted calling frog surveys at Tallahatchie NWR and Dahomey NWR. (1a, Photo 7)
- RM Russell coordinated the planting of 1,248 on-refuge acres in cooperation with Environmental-Synergy, Inc. (ESI). Since December of 1998, more than 9,187 Service-owned acres have been restored to bottomland hardwood habitat at NMRC. (2a)
- WB Woods and RM Barkley designed a moist soil management plan for the old catfish ponds at Coldwater River NWR. The plan was designed to provide habitat for shorebirds, wading birds, herptiles, and waterfowl. (3a)
- Volunteers and refuge staff placed 20 additional wood duck boxes on Dahomey NWR. This brings the total to 36 boxes on the Refuge. By March, all the wood duck boxes on Tallahatchie NWR (19 boxes), Coldwater River NWR (6 boxes), Dahomey NWR (36), and six FmHA properties (15 boxes) were cleaned out for the spring/summer nesting season. Fifteen of 40 boxes (38%) located at Tallahatchie NWR, Coldwater River NWR, and the FmHA properties were use by wood ducks during the 2000 breeding season. (4d)
- RM Russell participated in the Western Canada Waterfowl Banding Program from July 31 until September 1, 2001. Stationed near Wynyard, Saskatchewan, the 5-man crew successfully banded about 7,500 ducks, most of which were blue-winged teal. (5a)
- On January 24, 2001, personnel from the Private John Allen National Fish



Photo 7. Southern leopard frog. Photo by Becky Woods.

Hatchery delivered 1,400 redear sunfish, 2,100 bluegill, and 700 channel catfish to Dahomey NWR. The fish were stocked in the new lake located off Christmas Lake Road. 700 largemouth bass will be stocked in the Spring. (8a)

- On March 24 and 31, forty-five Boy Scouts, Girl Scouts, 4-H members and their parents volunteered to assist BT Harrigan, WB Wood, EO Roby and AA Willis plant trees at Dahomey NWR. The tree planting was a great success. Volunteers planted more than 900 oaks (water, willow, Nuttall, cherrybark, swamp chestnut), persimmon, sycamore, redbud, baldcypress, elm and blackgum trees. These trees will some day become a forest and provide food and habitat for a variety of species. For all their hard work, each volunteer was given a tree to take home. (8b)
- With the summer of 2001 came the renovation and addition to NMRC headquarters and the long-awaited construction of Dahomey NWR headquarter facilities. (9b, Photo 8)
- Wetland impoundments were constructed at the Lindsey, Wilkins, Goss and Povall tracts of Dahomey NWR. Wetland impoundments were also constructed at the Pennington tracts of Tallahatchie NWR. (2a)



Photo 8. In with the new and out with the old: the mobile home that served as Dahomey NWR headquarters for more than a decade was replaced this year.

Climatological Review - 2001 :

2001 Climatological data summaries for northwest Mississippi were not available at the time of this writing. The Climate Highlights below were given by Dr. Charlie Wax the state of Mississippi climatologist

Climatic Highlights:

Winter began on the tails of the second coldest December on record and stayed colder than average statewide through February, when temperatures dropped into the 20s all the way to the coast. Temperatures during the winter averaged from 3 to 4 degrees below normal statewide, and precipitation ranged from about 2 ½" below normal.

The spring months averaged normal to about 2 degrees below normal. Precipitation during this period was characterized by widespread heavy rains on occasion, but with enough dry periods between events to average out to about ½" below normal to about ½" above normal across the state.

During the summer, the state emerged from a three-year drought pattern and experienced abundant rainfall. Too much rain came in the late summer and adversely affected unharvested crops. Temperature averaged from about normal to 1 degree below normal. Precipitation averaged about 2" above normal.

The fall was characterized by unusually mild and dry conditions for weeks at a time, as a persistent upper level ridge of high pressure kept temperatures high and prevented any precipitation from occurring. This situation changed dramatically in late fall when a series of heavy rain and flood events began. Most locations in the state ended the year at or above normal for precipitation amounts.

1

Monitoring and Studies

1a. Surveys and Censuses

The following are significant wildlife related occurrences or events that took place during 2001 on lands administered by the NMRC:

- Refuge Manager Russell conducted aerial waterfowl surveys of North Mississippi Refuge lands this past year. Peak flight estimates occurred on January 10 but were significantly lower than for past years due to a prolonged period of sub-freezing weather throughout our work area. On that date, waterfowl observed totaled 31,559, not nearly as high as last years highest survey estimate which recorded 49,324.
- Biologist Woods conducted calling frog surveys at both Tallahatchie and Dahomey NWRs (Photo 9). Surveys were conducted in late spring and summer and detected a total of 9 species. These surveys will be continued in 2002 and will include an early spring survey which is likely to detect several additional species.
- Biologist Woods installed 5 arrays of 4 coverboards in various habitats at Tallahatchie NWR as a field trial. These coverboards were checked approximately every 2 weeks from mid-April to mid-July. Use was fairly low, but the following animals were detected: 3 southern leopard frogs (*Rana utricularia*), 2 yellow-bellied water snakes (*Nerodia erythrogaster flavigaster*), 1 five-lined skink (*Eumeces fasciatus*), and 2 ground skinks (*Scincella lateralis*). This was the only survey method used this year which detected any species of lizard.
- Biologist Woods ground-truthed 14 frog survey routes throughout Mississippi as part



Photo 9. Mud snake at Tallahatchie NWR. Photo by Becky Woods.

of the North American Amphibian Monitoring Program (NAAMP). Volunteers conducted surveys along 8 of these routes. This data is entered into the national database and used to analyze population trends across the eastern half of North America.

- Biologist Woods conducted late spring and summer frog surveys along 2 NAAMP routes (Boyle and Bruce) and conducted early spring, late spring, and summer frog surveys along an additional NAAMP route (Coffeeville). A total of 12 species of frogs were detected as well as great-horned owls, barred owls, chuck-will's-widows, and whippoorwill's. Six species were common to all 3 routes including: cricket frogs (*Acris crepitans/gryllus*), Fowler's toads (*Bufo woodhousei fowleri*), gray treefrogs (*Hyla chrysoscelis/versicolor*), green treefrogs (*H. cinerea*), bullfrogs (*Rana catesbeiana*), and green frogs (*R. clamitans*). This data is entered into the national database.
- RM Barkley worked with WB Woods locating current and past colonial wading bird rookeries within NMRC. Biologist Woods conducted colonial waterbird surveys at Gillon and Walker properties as part of a state-wide survey. Results are shown in Table 5 below.

Table 5: Summary of colonial waterbird surveys conducted June 20 and 21, 2001 at Gillon and Walker properties.

Species	Location	No. Active Nests	No. Adults	Est. Breed. Pairs
Great blue heron	Gillon	6		6
Little blue heron	Walker	9	12	9
Cattle egret	Walker	250	275	250

- RM Barkley observed about 150 wood storks at Coldwater River NWR on June 25. On July 3, 2001, WB Woods documented 200+ wood storks on the refuge.
- RM Russell performed aerial inspection of FmHA properties within the Tallahatchie NWR work area. Project ideas, trespass or other issues that can be seen from air were noted and action list developed for on the ground follow up.
- Biologist Woods conducted 5 malformed amphibian surveys on Dahomey and Tallahatchie Refuges in May and July. At each site, 79 – 127 newly metamorphosed frogs were captured, measured, and examined for any abnormality. Any individual displaying an abnormality was held in a separate container and later preserved. All “normal” individuals were released back at the capture site. Table 6 below summarizes survey results.

Table 6: Summary of malformed amphibian surveys conducted at Dahomey and Tallahatchie Refuges.

Date	Site	Species	Number	# Abnormal	% Abnormal	Avg. body length (mm)	Avg. tail length (mm)
5/7/01	MF-2 DAH	So. Leopard frog	108	7	6.48%	21.92	6.99
5/9/01	MF-4 DAH	So. Leopard frog	79	1	1.27%	24.57	31.09
5/25/01	MF-1 TAL	So. Leopard frog	107	2	1.87%	21.40	0.33
7/5/01	MF-5 DAH	Toad species	123	11	8.94%	13.38	0.50
7/18/01	MF-5 DAH	Green treefrog	101	17	16.83%	20.78	1.72

- Biologist Woods conducted shorebird surveys approximately every 10 days, from July 10 - September 16, 2001. Only the 8 ponds on the western half of the property were surveyed (136 acres total). Table 7 summarizes survey results.

Table 7: Summary of shorebird counts on ponds A - H (136 acres) at Coldwater River NWR.

Species	7/10/01	7/20/01	8/3/01	8/14/01	8/25/01	9/6/01	9/16/01	Total
Black-necked stilt		18			4	14	1	37
Dowitcher sp.		4	254		32	11		301
Greater yellowlegs	0	0	0	0	1	0	0	1
Killdeer	27	215	203	97	106	15	25	688
Least sandpiper	8	201	403	163	75	46	9	905
Lesser yellowlegs	2	19	56	13	6	9	2	107
Pectoral sandpiper	1	7	81	31	78		2	200
Semipalmated plover			14	11	1			26

Semipalmated sandpiper			59					59
Solitary sandpiper				6				6
Spotted sandpiper	1		1		1			3
Stilt sandpiper			21				2	23
Total	39	464	1092	321	304	95	41	2356

- Turkey brood surveys, which were initiated in June 2000, were continued by BT Harrigan. A route was mapped out that covers about 75% of Dahomey's roads and trails which takes about 1 ½ to 2 hours to complete. The survey is conducted weekly and all hens, gobblers, jakes and poults seen are recorded on a map of the route. Any turkeys seen during the rest of the week are also recorded. All recordings are then entered into a database/spreadsheet file.
- RM Russell cruised forested habitats on the Hester and Goss tracts of Dahomey NWR
- On August 24, 2001 a deer health evaluation was conducted at Tallahatchie NWR by Southeastern Cooperative Wildlife Disease Study, College of Veterinary Medicine, The University of Georgia. Four antlerless deer and a 10-point buck were harvested from the refuge pursuant to sampling.

Aerial Waterfowl Surveys

Waterfowl surveys were conducted on 7 properties managed by NMRC. The flight path of these surveys and results are shown in Figure 6 and Table 8.

Total waterfowl numbers increased nearly 10 fold between November 30 and December 20 (Photo 10). Peak number of waterfowl were observed on December 20. Earlier flight dates occurred during times of poor water conditions, and later flight dates occurred during a prolonged period of sub-freezing temperatures, which froze field water throughout the delta.



Photo 10. Drake mallard flying through timber at Tallahatchie NWR. Photo by Ramsey Russell.

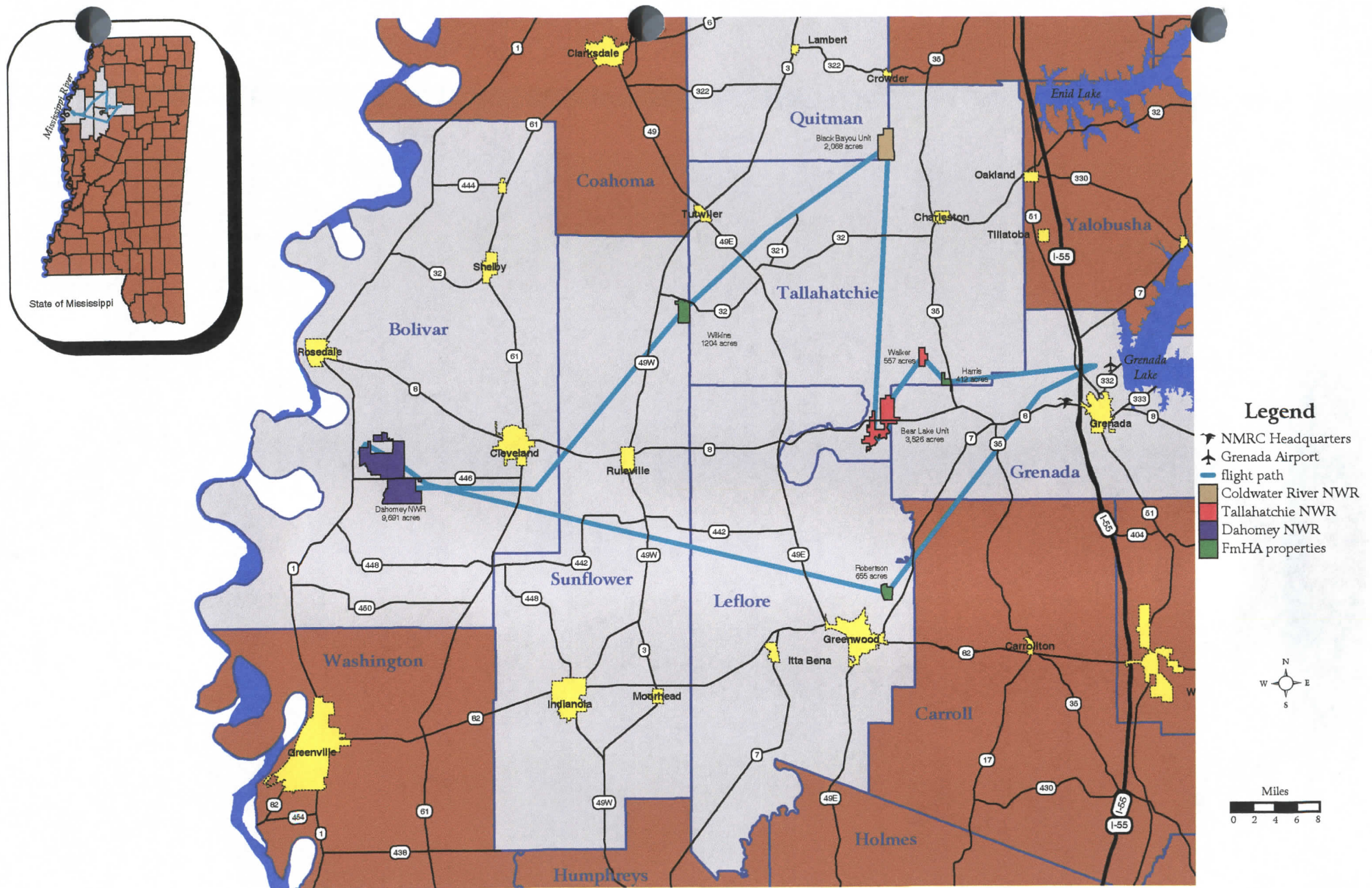


Figure 6. Flight path for 1999-2000 waterfowl surveys conducted by North Mississippi Refuges Complex.

by F. Broerman 1/19/99 USFWS MWMD

Table 8. Number of waterfowl on North Mississippi Refuges Complex properties as per aerial waterfowl surveys FY01. Ramsey Russell.

Survey Date	Water Conditions	Property	Total # Waterfowl	Mallard	GW Teal	Gadwall	DUCKS N Shoveler	A Wigeon	N Pintail	BW Teal	Other	Snow	GEESE Canada	Wh Fronted
26-Oct	very poor	Coldwater NWR	49	4	0	20	25	0	0	0	0	0	0	0
	poor	Dahomey NWR	2	0	0	0	0	0	0	0	2	0	0	0
	dry	Wilkins Tract	0	0	0	0	0	0	0	0	0	0	0	0
	very poor	Tallahatchie NWR	12	2	0	0	0	0	0	8	4	0	0	0
	very poor	Harris Tract	0	0	0	0	0	0	0	0	0	0	0	0
	dry	Robertson Tract	0	0	0	0	0	0	0	0	0	0	0	0
	very poor	Walker Tract	0	0	0	0	0	0	0	0	0	0	0	0
		FLIGHT TOTALS	63	6	0	20	25	0	0	8	6	0	0	0
30-Nov	fair	Coldwater NWR	1711	1274	200	140	25	10	60	0	2	0	0	0
	poor	Dahomey NWR	6	0	0	0	0	0	0	0	6	0	0	0
	very good	Wilkins Tract	388	159	0	79	150	0	0	0	0	0	0	0
	good	Tallahatchie NWR	151	67	2	57	0	0	0	0	25	0	0	0
	fair	Harris Tract	795	705	0	90	0	0	0	0	0	0	0	0
	good	Robertson Tract	78	25	0	51	0	0	0	0	0	0	0	0
	good	Walker Tract	138	74	0	62	0	0	0	0	2	0	0	0
		FLIGHT TOTALS	3285	2304	202	479	175	10	60	0	35	0	0	0
20-Dec	fair	Coldwater NWR	6244	4397	670	787	0	670	350	0	0	5	0	35
	poor	Dahomey NWR	0	0	0	0	0	0	0	0	0	0	0	0
	excellent	Wilkins Tract	701	600	0	50	0	0	50	0	0	1	0	0
	excellent	Tallahatchie NWR	4754	4454	0	275	0	0	0	0	25	0	0	0
	good	Harris Tract	18825	10750	3000	3000	1500	75	500	0	0	0	0	0
	excellent	Robertson Tract	885	435	175	250	0	25	0	0	0	0	0	0
	excellent	Walker Tract	150	0	0	150	0	0	0	0	0	0	0	0
		FLIGHT TOTALS	31559	20836	3845	4362	1650	100	900	0	25	6	0	35
Note: Frozen water conditions throughout delta. Waterfowl located in isolated pockets of open water only.														
10-Jan	fair	Coldwater NWR	6404	3995	450	1177	378	230	140	0	2	0	32	0
	poor	Dahomey NWR	0	0	0	0	0	0	0	0	0	0	0	0
	excellent	Wilkins Tract	951	580	0	201	100	10	60	0	0	0	0	0
	excellent	Tallahatchie NWR	1399	1142	0	175	50	5	0	0	16	0	11	0
	good	Harris Tract	1602	677	250	525	125	25	0	0	0	0	0	0
	excellent	Robertson Tract	154	102	5	18	0	25	0	0	4	0	0	0
	excellent	Walker Tract	1684	880	500	125	25	154	0	0	0	0	0	0
		FLIGHT TOTALS	12194	7376	1205	2221	678	449	200	0	22	0	43	0
24-Jan	good	Coldwater NWR	970	609	70	186	97	0	8	0	0	0	0	0
	poor	Dahomey NWR	20	12	0	0	0	0	0	0	8	0	0	0
	excellent	Wilkins Tract	479	242	160	6	58	8	4	0	3	0	0	0
	excellent	Tallahatchie NWR	26	24	0	0	0	0	0	0	2	0	0	0
	good	Harris Tract	661	258	0	204	133	0	2	0	64	0	0	0
	excellent	Robertson Tract	340	47	0	175	118	0	0	0	0	0	0	0
	excellent	Walker Tract	367	87	2	263	15	0	0	0	0	0	0	0
		FLIGHT TOTALS	2863	1279	232	834	421	8	14	0	77	0	0	0
7-Feb	good	Coldwater NWR	541	38	10	232	195	0	10	0	4	0	2	0
	poor	Dahomey NWR	140	8	0	130	0	0	0	0	2	0	0	0
	excellent	Wilkins Tract	198	60	0	24	112	0	2	0	0	0	0	0
	good	Tallahatchie NWR	97	51	0	30	14	0	0	0	0	0	2	0
	good	Harris Tract	299	53	5	63	127	0	0	0	51	0	0	0
	excellent	Robertson Tract	544	12	0	452	76	0	0	4	0	0	0	0
	excellent+	Walker Tract	210	144	0	52	2	0	0	0	12	0	0	0
		FLIGHT TOTALS	2029	416	15	883	526	0	12	4	69	0	4	0
22-Feb		Coldwater NWR												
		Dahomey NWR												
		Wilkins Tract												
		Tallahatchie NWR												
		Harris Tract												
		Robertson Tract												
		Walker Tract												
		FLIGHT TOTALS												
7-Mar		Coldwater NWR												
		Dahomey NWR												
		Wilkins Tract												
		Tallahatchie NWR												
		Harris Tract												
		Robertson Tract												
		Walker Tract												
		FLIGHT TOTALS												

1b. Studies and Investigations

- RM Barkley met with Federal Highway Administration personnel in April to provide them with roads on Dahomey and Tallahatchie NWR's for review under the TEA-21 process
- On June 15, 2001, RM Lee met with Dr. Robert Kissel from Arkansas State University to discuss the possibility of Dahomey NWR being used as one of many study sites for Dr. Kissel's research on white-tailed deer. The study would examine the effects of deer populations on birds, small mammals, insects, and vegetation. Dr. Kissel is not asking the Service for funding. He only wants to use the refuge as a study site. Dr. Kissel was impressed with the study site and he is quite confident that he will find funding for the study. He predicted the study to begin in 2002.
- Along with the staffs from Yazoo NWR, North Louisiana Refuges Complex, and the WHM Jackson, RM Barkley participated in the Biological Review of FmHA properties in the Central Mississippi Refuge Complex. Part of the review is to develop criteria that will indicate those properties that provide little to mission of the Service and which could be used to recommend disposal of properties.
- During March, RM Russell saw 15 short-eared owls in an old field at the Goss tract of Dahomey NWR.
- RM Russell was unable to provide acreage to USGS Patuxant Wildlife Research Center for installation of a cottonwood study at Tallahatchie NWR. There are no remaining acres available for reforestation at NMRC.
- RM Barkley prepared a flex funding request for base line studies relating to endangered pondberry on the Hester, Jr. tract of Dahomey NWR in Bolivar County.
- RMs Barkley, Lee, and Russell updated the waterfowl and shorebird management capabilities for Coldwater River, Dahomey, and Tallahatchie NWRs, respectively, for the LMV Joint Venture Office.

2

Habitat Restoration

2a. Wetland Restoration: On-Refuge

With the delta's heavy clay soil types, the best planting conditions depend on winter rainfall and wet, muddy conditions. This past winter, planting conditions were generally good throughout the NMRC work area. RM Russell coordinated the planting of 1,248 on-refuge acres in cooperation with Environmental-Synergy, Inc. (ESI). Since December of 1998, more than 9,187 Service-owned acres have been restored to bottomland hardwood habitat at NMRC. In aggregate, 10,608 acres have been reforested on- and off-refuge during this time period. For the time being, NMRC has no acreage available or in need of reforestation.

In January, RM Russell made a presentation regarding accomplishments and considerations of large-scale reforestation efforts in cooperation with ESI during a reforestation meeting with Service field staff from Regions 2 and 3. The presentation included a site visit to Tallahatchie NWR to see reforestation projects. In February, RM Russell accompanied ESI president Randy Williams to Big Muddy NWR to explain the benefits of the program to personnel from the Service, state, and private organizations.

In May, RMs Russell and RM Barkely completed a NAWCA Grant Package for \$433,000 to rehabilitate the old catfish ponds at Coldwater River NWR. RM Russell also completed a NAWCA Grant Package for \$145,000 to rehabilitate catfish ponds at the FSA Henson property in June. It was anticipated that the proposals would be submitted through the LMV Ecosystem Team as part of a larger proposal package whereby the value of ESI related reforestation projects would be leveraged for matching funds from the National Fish and Wildlife Foundation.

RM Barkey spent most of 1 day attempting to determine how to get a heavy transport truck to the Fooshee property in Union County. With the spring floods, two bridges washed out and the alternate routes either have inadequate bridges or turns too sharp for

the truck to make. We were unable to construct a moist soil impoundment on the tract because there is no way to keep water from backing onto our off-refuge neighbors.

Wetland impoundments were constructed at the Lindsey, Wilkins, Goss and Povall tracts of Dahomey NWR and at the Pennington tracts of Tallahatchie NWR.

Two waterfowl management units were constructed near the Well Road at Dahomey NWR. Construction costs of the two units were jointly funded by DU and the Service. Most of \$45,000 supplied by DU was donated by the Heinz family in memory of their son who was tragically killed in an automobile accident. Construction of the units was completed during June. A dedication service was held at Dahomey NWR in November to commemorate the completion of the two units. The Heinz family was present. Ken Babcock of DU and Dale Hall, Region 4 DRD were the primary speaker at the event. Approximately 60 people attended the dedication (Photo 11).



Photo 11. Region 4 Assistant Regional Director Dale Hall speaking to attendees of the Heinz dedication ceremony at Dahomey NWR. Photo by Kim Harrigan.

2b. Upland restoration: On-refuge

Nothing to report.

2c. Wetland restoration: Off-refuge

By participating actively in a partnership with the Natural Resource Conservation Service (NRCS), the NMRC accomplishes wildlife habitat conservation beyond Service property boundaries by helping to design and implement Wetland Reserve Program (WRP) and Conservation Reserve Program (CRP) projects. Both of these NRCS programs offer cash payments to landowners who agree to discontinue farm activities on eligible farmlands, and to replace the agricultural crops with some form of permanent cover, usually trees. CRP enrollment entails a 15 year contract and requires that the landowner pay 50% cost share. Projects funded through the Partner's for Fish and Wildlife program minimize out-of-pocket expenses incurred by the landowner, but extend the period of time conservation practices must be maintained by an additional 25 years. Last year 248 acres of private lands within the NMRC work area were reforested under similar scenarios (Table 6).

A diversity of native tree species are usually planted, including several oak species such as Nuttall, willow, and water. Other species of ecological importance are bald cypress, green ash, sweetgum, persimmon, pecan, sugarberry, eastern cottonwood, and American sycamore. Hardwood seedlings were custom ordered from nurseries throughout the southeastern U.S. to ensure adequate size and vigor. Seedlings were picked up or shipped from the nurseries and then stored in refrigerated coolers to ensure they remain dormant until planted.

2d. Upland restoration: Off-refuge

Nothing to report.

3

Habitat Management

3a. and b. Manage Water Levels and Moist Soils Units

In 2001 the NMRC equipment operators completed wetland restoration projects on 6 FmHA properties. Several levees were built and water control structures were installed to catch and retain water on these newly restored wetlands. These projects will restore the hydrology on several hundred acres on these properties. Projects completed during 2001 are summarized in Table 9.

Additional events worth noting are as follows:

- Slow water draw down within a 160-acre moist soil complex at Tallahatchie NWR was initiated April through June at Tallahatchie NWR. The moist soil complex consists of 6 former rice fields allowed to go fallow as part of a mitigation agreement with the MDT. A few boards were removed from water control structures and the remaining water was allowed to evaporate. The results were fabulous - lush stands of barnyard, foxtail, and panic grasses; sprangletop, dock, and annual smartweed. Pat Stinson, Wildlife Biologist, Wildlife HMO Jackson, reported in August that the unit was among one of the best he'd visited in terms of waterfowl food production, estimating that millet production was in excess of 1,000 pounds per acre. An arrangement with the cooperative farmer has been made whereby 2 rice fields will be farmed annually on a rotating basis. We now anticipate cultivating every few years and manipulating water levels during the fallow interval to facilitate production of desirable moist soil plants in a cost effective manner.
- In May, boards were removed from the water control structures in the 80 acre moist soil unit located on the north side of Dahomey NWR. These fields were disced as soon as they were dry enough to promote desirable moist soil vegetation growth.
- * During July, H.C. Strider, the cooperative farmer at Tallahatchie NWR, disced a 35 acre moist soil unit at Tallahatchie NWR and planted millet in order set back plant

succession and establish desirable herbaceous wetland plants. The moist soil unit, which was constructed in 1999, had a weak component of desirable moist soil vegetation. It is anticipated that future moist-soil management activities will foster development of desirable grasses within the unit.

- During September, boards were placed in the water control structures of the moist soil complex at Tallahatchie NWR. The northeast and west compartments were flooded with the use of a diesel power unit. Several water and wading birds used this area after it was flooded. Blue-winged teal began using the area immediately.
- WB Woods and RM Barkley designed a moist soil management plan for the old catfish ponds at Coldwater River NWR (Table 10, Figure 7). The plan was designed to provide habitat for shorebirds, wading birds, herptiles, and waterfowl.
- In August RM Barkey disced 8 Rotation 1 ponds at Coldwater River for shorebird management and began pumping water.
- RM Barkley constructed a matrix of riser dimensions of all water control structures at Coldwater River NWR. Over the years NMRC has installed both aluminum and corrugated pipes requiring different lengths of stop logs and both 5/4 and 2" thicknesses. The matrix will allow Barkly to pre-cut boards at the shop.

Table 9. 2001 summary of water management projects constructed on FmHA transfer properties administered by NMRC.

FmHA Projects	County	No. water control structures and levees built	Estimated acres of moist soil or permanent wetlands created
Povall (180)	Sunflower	1 wcs, 1 levee	50
Wilkins (1204)	Sunflower	2 levees	90
Goss (543)	Boliver	2 wcs, 2 levees	40
Lindsey (204)	Sunflower	1 wcs	30
Pennington (470)	Tallahatchie	1 wcs, 1 levee	15
Pennington (360)	Tallahatchie	1 wcs, 1 levee	20
Totals		6 wcs, 7 levees	245

Table 10. Shorebird water management plan for Coldwater River NWR. Refer to accompanying Figure 7.

2-year rotation, 8 ponds in each group – waterbird ponds
 6 ponds left unmanaged – frog ponds
 2 ponds passively managed

Waterbird Ponds

Season	Year 1	Year 2
Spring	Complete draw-down. Begin as soon as able to get in and clear ditches. (Ideally, begin March 1 so there are some flats for spring migrants.)	Retain water (don't pump, but don't pull any boards, either)
Summer	Disk, immediately reflood to minimum depth of 2" by June 15, allow water to naturally evaporate. No pumping or board removal.	Slow draw-down beginning on or about June 1. Goal 25% of ponds with 25% mud flats by July 15. (Stagger timing of drawdowns, pump water as ponds dry to maintain habitat.)
Fall/Winter	Replace all boards Nov. 1 and bring to full pool .	Replace all boards Nov. 1 and bring to full pool.

Pond Assignments:

Year 1: A, C, F, H, I, J, T, V

Year 2: B, D, E, G, K, L, S, U

passive management – M and N/O - no pumping capabilities

frog ponds – PP, P, Q, R, W, and X – no pumping capabilities, generally increased willow colonization.





Rationale for Pond Assignments and Additional Work Necessary:

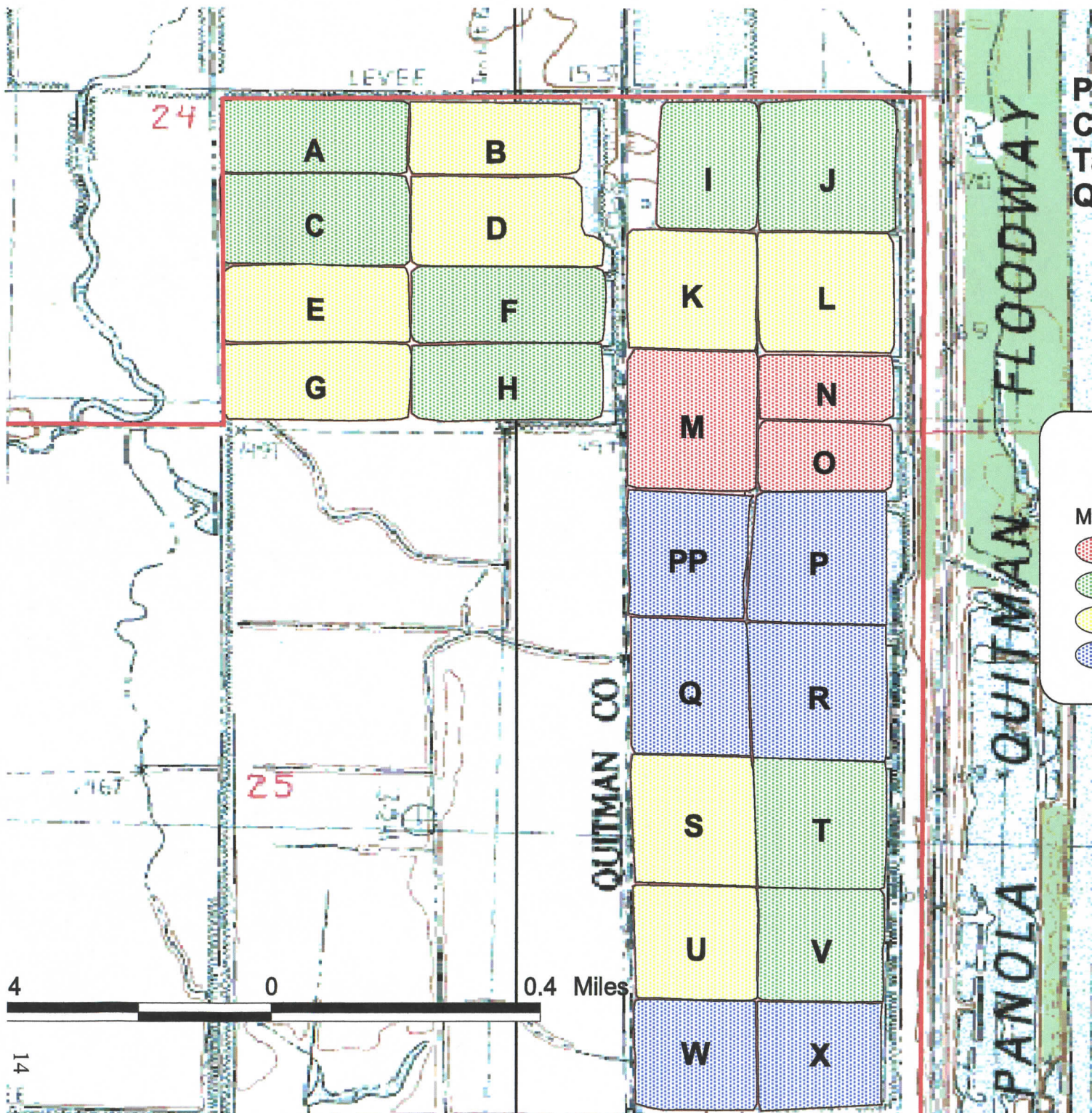
- Only need to pump water to ½ ponds at any given time.
- Within each set of adjacent ponds on same year rotation, stagger treatment in order to supply a steady supply of resources.
- Install culvert between ponds N and O and manage as a single unit.
- Frog ponds will also provide some late spring/summer/fall duck habitat, particularly for teal.
- Timing of reflooding and drawdowns should meet the recommendations of the LMVJV regarding timing of closing water control structures to provide waterfowl habitat.

Pond Management Plan Coldwater River NWR Tallahatchie and Quitman Counties, MS

Legend

Management Option

-  passive management
-  rotation 1
-  rotation 2
-  unmanaged



3c. Graze/Mow/Hay

- All roads and roadsides at Dahomey NWR were mowed during the month of May.
- During June, RM Lee and BT Harrigan mowed approximately eight miles of rights-of-way on Dahomey NWR to enhance brood habitat for wild turkeys.
- All roads, roadsides, and trails at Dahomey NWR were mowed and sprayed during the month of June. Dozer work was needed on three trails on the southeast side of the refuge to remove trees that had fallen due to a tornado earlier this spring.
- In June, RM Russell and the YCCs sprayed all roads, signs, and bluebird nest boxes at Tallahatchie NWR to control vegetation.
- In September, roads and trails at Dahomey NWR were mowed by RM Lee and BT Harrigan. Many roads and levees were maintained on FmHA properties this month also.
- Levees and property boundaries were mowed on 27 of the FmHA properties during the summer of 2001. This equates to several miles of mowed strips along the edges of and within properties managed by NMRC.
- Road edges, levees, and boundaries of Tallahatchie and Coldwater River NWR's were mowed during the summer of 2001. These areas are mowed to keep plant succession in the early stages which allows for easier access to the roads and levees when repair or maintenance is required. Strips are mowed on boundaries to be used as fire breaks.

3d. Farming

No cooperative farming took place at Coldwater River NWR during 2001. This year 15% of Tallahatchie NWR was farmed. Seven percent of Dahomey NWR was farmed. Table 11 identifies the crops and acreage farmed on these two refuges.

Table 11. A summary of NMRC's 2001 coop farming program.

Coop Farmer or Refuge	acres in rice	acres in corn	acres in milo	acres in soybeans	Refuge Share
Clemons	292				winter pumping of rice fields.
Herbison				239	Maintenance of an 80 acre moist soil unit.
Dahomey NWR totals (531 acres farmed)	292			239	
Strider	60	76	315	177	100% of the corn, 20% of milo, 5% of the rice.
Tallahatchie NWR totals (628 acres farmed)	60	76	315	177	

Between 2000 and 2001, cooperatively farmed lands at Tallahatchie and Dahomey NWRs remained the same. Although we may incrementally reduce the amount of farmed lands occurring on these refuges, cooperative farming will continue to be used to maintain desired succession in moist soil units by utilizing rotational crop planting among existing and future moist soil areas.

The Service requires farmers to leave 25% of all crops planted or that they do work on the fields to enhance their wildlife value (Photo 12).

For example, farmers have been reestablishing levees in rice fields and then flooding them during the winter for waterfowl. Thousands of waterfowl can be seen using these fields during winter months.



Photo 12. Ducks utilize leave portion of cooperatively farmed milo at Tallahatchie NWR. Photo by Ramsey Russell.

3e. Forest cutting

Nothing to report.

3f. Prescribed burning

NMRC staff did not perform any prescribed burning on properties that we administer.

3g. Control pest plants

No other pest plant control efforts occurred.



Photo 13. Great blue heron hunting in Tippo Bayou at Tallahatchie NWR. Photo by Ramsey Russell.

4

Fish and Wildlife Management

4a. Bird banding

Nothing to report.

4b. Disease monitoring and treatment

Nothing to report.

4c. Reintroductions

Nothing to report.

4d. Provide nest structure

Volunteers and refuge staff placed 20 additional wood duck boxes on Dahomey NWR (Photo 14). This brings the total to 36 boxes on the Refuge. By March, 2001, all the wood duck boxes on Tallahatchie NWR (19 boxes), Coldwater River NWR (6 boxes), Dahomey NWR (36), and six FmHA properties (15 boxes) were cleaned out for the 2001 spring/summer nesting season. Fifteen of 40 boxes (38%) located at Tallahatchie NWR, Coldwater River NWR, and the FmHA properties were used by wood ducks during the 2000 breeding season.



Photo 14. The 4-H Club at Grenada Jr. High School constructed 25 wood duck nest boxes for NMRC. Photo submitted by Mary Ann Clark.

Maintenance of all 36 wood duck nest boxes at Dahomey NWR was completed during the month of March. BT Harrigan, EO Roby, and WB Woods completed this project. In June, WB Woods provided maintenance of wood duck boxes at the Walker Tract of Tallahatchie NWR.

RM Russell, PR Denton, and the YCC's installed 15 blue bird nest boxes at Tallahatchie NWR during the month of June.

4e. Predator and exotic control

Beavers and nutria are abundant on most NMRC properties. Their presence requires ongoing repair work and maintenance on levees and WCSs. Beavers plug up water control structures, while nutria burrow through levees. Unplugging structures and keeping them unplugged is a difficult endeavor, but can be done with much effort. Nutria burrows destroy the integrity of levees making mowing and travel on levees dangerous.

Beaver activity on NMRC properties causes problems off-refuge as well. In January at the request of the Tallahatchie County Engineer, RM Russell issued a Special Use Permit to Jacky Fox, USDA Wildlife Services trapper, to trap beavers and remove beaver dams along Brushy Creek, which traverses the Walker tract of Tallahatchie Refuge. Following up on a complaint regarding beaver activity on the Gwin tract of Tallahatchie NWR this past June, RM Russell issued a Special Use Permit to an adjacent farmer to access a beaver dam via refuge road to dig it out.

Feral hog populations are apparently growing on many properties managed by NMRC. Sightings by staff and hunters are increasing annually. Hog activities cause damage to wildlife habitat, levees, roads, and crops of adjacent land owners. Feral hogs also have the potential of spreading diseases in humans. The shooting of feral hogs by permitted hunters during open hunting seasons is encouraged.

5

Coordination Activities

5a. Interagency coordination

RM Lee participated in the Mississippi Black Bear Restoration Task Force and attended several meetings in Jackson, MS. This task force, which is made up of State and Federal resource agencies, is working together on an initiative to restore black bears to localities in Mississippi.

RM Russell participated in LMR Focus Group meetings in Jackson, Mississippi, this year. The purpose of the LMR Focus Group, which consists of representatives from every federal, state and private conservation agency within the LMR ecosystem, is to identify priority conservation goals and provide a consensus for resolving these issues through partnerships.

In June, RM Barkley worked with the Real Estate Division, Corps of Engineers Vicksburg District, in an attempt to determine fee ownership of the Panola Quitman Floodway East Bank Levee. According to the Corps, all they have is a perpetual construction/operation easement. Their real estate records only show fee ownership in the 60's when the levee was constructed.

RM Russell coordinated reforestation needs and activities among Service, state, and other partners to fulfill an agreement with ESI to reforest 100,000 refuge acres over a 5-year period in Arkansas, Louisiana, and Mississippi. He coordinated site prescriptions, maintained records of planting activities for all refuges within the lower MAV and provided invoicing to the National Fish and Wildlife Foundation for payment to ESI contractors.

In August 2000, RM Russell completed a month-long detail at the Washington Office. Russell's assignment was to develop a desk guide for forest stewardship planning for the Cooperative Forestry Unit, State and Private Lands, and USDA Forest Service. The guide will be used by state foresters to develop plans on nonindustrial private forest lands throughout the country as per the Forest Stewardship Program. Russell submitted drafts of the document to reviewers from the Service, U.S. Forest Service, universities, and private conservation agencies throughout the country for comment. In February 2001, Russell

returned for 1 week and completed the document. Submitted in June 2001, the document should be published by December 2001.

WB Woods initiated a partnership with Sammy King at University of Tennessee Knoxville to have graduate research conducted on several fee-title tracts administered by NMRC. The research will evaluate success of wetland restoration in terms of amphibian diversity.

RM Russell participated in the Western Canada Cooperative Waterfowl Banding Program from July 31 until September 1, 2001. Stationed near Wynyard, Saskatchewan, 26 swim in traps were employed on the Campbell Project and Foam Lake Heritage Marsh, wetland areas managed by DU Canada. In addition to Ramsey, 5-man crew consisted of Phil Thorpe, Division of Migratory Bird Management, Denver, Colorado, Randy Dettmers, Region 5 Division of Migratory Birds, Hadley, Massachusetts, Bob Raftovich, Division of Migratory Bird Management, Laurel, Maryland, and Don Seay, Ecological Services, Jackson, Mississippi. During the period 3 August to 28 August, 7,336 ducks were banded during 557 trap nights including 1,060 mallards, 273 pintails, 5,805 blue-winged teal, 85 gadwall, and 45 green-winged teal (Photo 15).



Photo15. RM Russell with a catch box full of blue-winged teal while on banding detail. Photo by Don Seay.

On October 18, 2001, RM Lee spoke with Calvin Robertson of the Great River Road State Park to discuss the possibilities of the Service assisting MDWFP with a wetland construction project at the park.

In November, RM Russell met with Adam Tullos and Jason Ross, MDWFP Conservation Resource Biologists, to discuss a project at the MDWFP managed Grenada Waterfowl Management Area. Later that month, EO Jones facilitated their ability to pump water into waterfowl impoundments by creating an earthen ramp from which they could access a nearby water source and a ditch through which water could flow into the impoundments.

WB Woods attended the annual Partners for Fish and Wildlife meeting this year.

5b. Tribal coordination

Nothing to report.

5c. Private land activities

Requests for technical assistance increased this year and interest in the Partners for Fish and Wildlife program continues to grow. Private land owners with property within our 26 county work area who have received habitat restoration assistance from NMRC appreciate the quality of our Equipment Operators' work and they are spreading the word to all of their friends. PL Gard, RMs Russell and Lee, and WB Woods each received requests for technical assistance during 2001. Although there were too many requests for private lands assistance for NMRC staff to handle, several great projects were completed. Table 12 summarizes all private lands work completed by NMRC staff during 2001.

Table 12. Private lands projects NMRC was involved with in 2001.

Project Name	Type	County	No. water control structures and levees	Wetland Acres	Reforestation Acres
MS Audubon		Marshall	1 wcs, 1 levee	20	
Campbell	Regional	Tallahatchie			9
Grass Field Farm	Regional	Tallahatchie			98
Granola Hunt Club	Regional	Quitman			25
Smith	Regional	Grenada	1 wcs, 1 levee	30	30
Lott	Regional	Grenada	2 wcs, 2 levees	30	40
Lea	Regional	Montgomery			15
Holden	Regional	Grenada			30
Spencer	Regional	Tallahatchie			30
White	MS	Quitman	5 wcs provided	304	
Dossett	MS	Boliver	1 wcs provided	30	

LeGrand	MS	Sunflower	6 wcs provided	240	
Sherwood	MS	Boliver	4 wcs provided	40	
Hardin	MS	Calhoun	2 wcs provided	20	
Shephardsvill	MS	Calhoun	1 wcs provided	15	
Totals			23 wcs, 4 levees	729	277

WB Woods created a private lands database that allows NMRC staff to track and monitor accomplishments. It will also expedite follow up projects and allow NMRC staff to identify conservation focus areas in relation to refuge properties.

5d. Oil and gas activities

Nothing to report.

5e. Cooperative/Friends Organizations

Two waterfowl management units totaling 292 acres were constructed near the Well Road on the south end of Dahomey NWR. Construction costs of the two units were jointly funded by **DU** and the Service. Most of \$45,000 supplied by DU was donated by the Heinz family in memory of their son who was tragically killed in an automobile accident. Construction of the units was completed during June. DU provided the survey, pipes, equipment, and operators. The Service's share of the project was \$15,000.

For the third consecutive year, **Shreveport Green** donated containerized, 4-6 feet tall trees to Dahomey NWR. BT Harrigan, with help from the **Cleveland Troop Boy Scouts of America**, hand planted Nuttall oak, willow oak, water oak, and sycamore trees at Dahomey NWR (Photo 16).



Photo 16. Volunteer tree planters at Dahomey NWR. Photo by Kim Harrigan.

Several scouts from the **Grenada Troop Boy Scouts of America** helped hand plant hardwood seedlings at Tallahatchie NWR. The scouts planted Nuttall oak, sweetgum, bald cypress and green ash (Photo 17). They had a great time and also earned their forestry patches.



Photo 17. Grenada Troop Boy Scouts of America had a great time and learned about planting trees at Tallahatchie NWR. Photo by Ramsey Russell.

6

Resource Protection

6a. Law enforcement

Refuge Officers at NMRC were busy during 2001 (Photo 18). The hunting seasons on Dahomey and Tallahatchie NWR's and off-refuge migratory bird seasons traditionally provide the most opportunity for our officers to make cases. This year was no different than any other. Vandalism, theft, fire, and illegal hunting occur frequently on FmHA properties. Evidence of other violations on properties can be seen on each new visit. NMRC ROs are responsible for the resource protection of over 33,000 acres of refuge and FmHA lands within 26 counties in north Mississippi. The number of Violation Notices issued by NMRC officers was higher than in recent years. See Table 13 for a list of the violations and the number of citations for each that were issued during 2001.

The following are NMRC law enforcement highlights for 2001:

- PR Denton and RO Gard apprehended two persons that were commercial fishing on Tallahatchie NWR. Their boat, motor, trailer, four gill nets, 22 paddle fish, 12 buffalo fish, and six catfish were seized. Both faced two federal charges and several State of Mississippi charges. Each was convicted of the federal charges and paid their fines of \$ 500.00. Additionally, each paid fines in excess of \$1000.00 after they pleaded guilty to the State charges in the Grenada County Court.
- RM Barkley responded to a request from a landowner adjacent to the E. Savage property of Coldwater River NWR to support his efforts to close a public road that leads to Service property. Barkley confirmed that the road was in fact "public" and informed the landowner and the Quitman County



Phot 18. PL Gard and PR Denton with fish seized from commercial fisherman at Tallahatchie NWR. Photo by Robert Barkley.

board of supervisors that NMRC did not support the road closing.

- All station RO's completed their physical exams and this year's law enforcement refresher training.
- In March, RO Barkley met with Contact Special Agent Pilgreen to review a case file for waterfowl baiting cases that were to be presented to the AUSA in late March. It was the first time we have presented Placing Bait under the recent amendments to the Migratory Bird Treaty Act.
- During the month of March, the following NMRC properties were posted by EOs Brasher and Perry: Robertson, Povall, Bowling, Gwinn, Scott, Pennington, Starr, Hester, Riley, Lindsey, Wilkins, Whaley, Smith, Fooshee, Trainor, Coldwater River NWR, Millican, Upchurch, Kolle, Harris, and Goss.
- SA Jim Pilgreen, who maintained an office at NMRC headquarters, retired on March 29, 2001.
- On March 19, 2000, RM Lee inspected the three Lindsey FSA properties, the 42 acre Walker FSA property, and the 1, and 7 acre Powell floodplain easements. All boundary signs were inspected. Missing or dilapidated signs were replaced. Notes were taken on any violations that were found on each property. Memorandums to the files of each property will be drafted once all properties are inspected.
- On March 20, 2001, RM Lee inspected Powell (40 ac), Riley, Carmicle, and both McClure FSA Properties. All boundary signs were inspected. Missing or dilapidated signs were replaced. Notes were taken on any violations that were found on each property.
- On March 22, 2001, RM Lee inspected Holcomb, and both Balducci FSA properties. All boundary signs were inspected. Missing or dilapidated signs were replaced. Notes were taken on any violations that were found on each property.
- Federal Magistrate Judge Bogan found 2 persons hunting over bait and 2 persons who placed the bait for the purpose of attracting migratory waterfowl guilty and fined them a total of \$ 2,120 dollars. One additional person charged with hunting over bait was found not guilty by Judge Bogan. The violations occurred in Tallahatchie County on the opening day of the 2000/2001 waterfowl season.
- On June 13, 2001, RM Lee surveyed the Hester III FSA property. There was agricultural encroachment and a deer stand on the property. Few signs needed to be replaced.

- On June 15, 2001, RM Lee and BT Harrigan surveyed the Clifton FSA property. Signs were replaced. Two mower width strips were mowed around the easement boundary adjacent to two of the three residents on the property.
- On June 7, 2001, RO Lee was in Federal Court to testify on a waterfowl baiting case. RO Barkley was so prepared that RO Lee's testimony was not required.
- In July, RO Barkley attended court in Oxford, MS, to observe first hand how Magistrate Judge Allan Armstrong conducts her petty offense docket. RO Barkey observed considerable differences in how Judge Armstrong and the AUSA conduct court in Oxford and how Judge Bogan conducts court in Greenville, MS. Barkley provided PL Gard with a memo on the specifics of what NMRC will need to do prior to having a case come before Judge Armstrong.
- RO Barkley coordinated with MDWFP District 2 Captain McNeeley the Southeastern disease Group deer collection effort for Tallahatchie NWR the 3rd week in August.
- On September 12, 2001, RM Lee surveyed the Moses FSA easement. There were no problems with the property.
- RM Russell replaced missing and dilapidated signs at Tallahatchie NWR during the month of September.
- One of our freak accident/cases this year involved two young men on the Service property known as Raynor Starr in Quitman County MS. The 2 men were in a boat fishing and shooting turtles with a Glenfield 22 caliber rifle when one of the bullets ricocheted and hit a person in the leg at a house adjacent to the refuge. Since the property is closed to public access, the two subjects were charged with six violations each and they both paid fines of \$ 800.00.
- On October 19-20, 2001, RM Russell inspected the following NMRC properties: the 352-acre Harris conservation easement; 40-acre Harris conservation easement; 360- and 470-acre Pennington tracts; 420-acre Mabus tract; Denman conservation easements; Scott tracts; Gwin tract; Walker tract. Notes were taken on any violations that were found on each property.
- On September 13, 2001, RM Lee surveyed the Safley FSA easement. There were no problems with this easement.
- PR Denton conducted firearms qualifications for 3 SA's and 7 RO's in Mississippi, Louisiana & Arkansas.
- During the 2001 Labor Day Weekend opening of dove season. North Mississippi

Refuges complex hosted a dove task force which included all 4 NMRC RO's, 10 special agents and 7 MDWFP Conservation Officers. PR Denton began aerial reconnaissance prior to the Division of LE arriving in Grenada. This turned out to be very important to the success of the detail by locating three baited fields which resulted in a majority of the violations. The task force efforts resulted in 174 violations of which 142 were processed through Federal Court and 32 were processed through State Court.

- During the month of November, RM Russell met with several landowners that have floodplain or conservation easements administered by NMRC. Landowners Harris, Moor, Hawkins, and Holliman were contacted. Because many of these properties are frequently sold, as often as not for hunting purposes, it is necessary to periodically ascertain landowners and to discuss issues or answer any questions they may have regarding easement restrictions.
- RM Barkey discussed the eviction of Peter McKinsey at the Lindsey tract of Dahomey NWR with the Interior Solicitor's office in Knoxville, TN. Since Mr. McKinsey is deceased and his wife and sons have moved, the issue is moot. The Solicitor is concerned, however, with the junk and debris which remain from many years of storing wrecked automobiles, as well as possible hazardous material, and will recommend to the RO that NMRC clean up the property.
- NMRC purchased two robo deer decoys this year and the two deer were put out at Dahomey NWR on the opening day of the gun hunt. Within a fifteen minute period we had three violators stopped and were completing field information reports. We knew the decoys were good when four vehicles stopped within 100 yards of the officers and LE vehicles, and one of the occupants shot at the robo deer (Photo 18).



Photo 19. Great shot! NMRC's Robo Buck was hit between the eyes during his debut at Dahomey NWR. Photo by Jeff Lee.

Table 13. Law enforcement violations reported by the North Mississippi Refuges Complex during 2001.

CODE	VIOLATION DESCRIPTION	NUMBER OF VIOLATIONS
20.21(b)	Take Migratory Game Birds with Shotgun Capable of Holding More than Three Shells.	29
20.21(I)	Take Migratory game Birds with the Aid of Bait.	55
20.21(j)	Take migratory waterfowl while possessing toxic or lead shot.	3
20.22	Take Migratory Waterfowl During Closed Season.	4
20.24	Take Migratory Game Birds in Excess of the Daily Bag Limit.	17
20.36	Violation of tagging requirements for migratory game birds.	5
20.72	Take Migratory Waterfowl without State Stamp.	2
20.72	Hunting Migratory Game Birds without State License.	29
16 USC 718a	Hunt Migratory Waterfowl without a Federal Duck Stamp.	2
16 USC 704B2	Did Unlawfully Place Bait on an Area for the Purpose of Taking Migratory Game Birds.	6
26.21 (a)	Trespass on a National Wildlife Refuge.	6
26.22 (b)	Entering a National Wildlife Refuge without the required Refuge Permit.	2
27.31	Travel in or use of any motorized, or other vehicle, on a National Wildlife Refuge on other than designated routes of travel.	2

27.31 (a)	Operate a vehicle on a National Wildlife Refuge in violation of state law.	4
27.32 (b)1(i)	Operate a Boat in Violation of U.S. Coast Guard Regulations.	2
27.41	Possession of unauthorized firearms on a National Wildlife Refuge.	5
27.51	Destroy or Attempt to Destroy Animal on a National Wildlife Refuge.	2
27.94 (a)	Simple Littering.	2
32.2 (a)	Hunting on a National Wildlife Refuge without the required state hunting license.	4
32.2 (d)	Hunting from a public road.	2
32.2 (e)	Failure to comply with Refuge Hunting Permit	5
32.2 (j)	Possession of alcohol while hunting on a National Wildlife Refuge.	3
32.5 (a)	Fishing on a National Wildlife Refuge without the required state license.	2
	Total Violations	193

6b. Wildfire preparedness

With current staffing, the number of NMRC arduous wildland firefighters is 3. All three of our firefighters received additional training and experience during 2001.

6c. Manage permits and economic uses

Nothing to report.

6d. Contaminant investigation and cleanup

Nothing to report.

6e. Manage water rights

Nothing to report.

6f. Manage cultural resources

Nothing to report.

6g. Federal Facility Compliance Act

Nothing to report.

6h. Land acquisition

During July 2000, RM Russell conducted a visual inspection of the Damage property for Ken Clough, Jackson, MS Realty. Clough has been working on the acquisition of this property for quite some time and the owners are potentially ready to deal with the Service. During October, contract appraisers were escorted to this property by RM Lee. The appraisal was to be completed by December 2000. During October and November 2000, Russell conducted a timber cruise on the Damage property to assess the value of the standing timber for a property appraisal for Realty, Jackson. Russell submitted the timber appraisal to Realty during December, 2000. In February 2001 we received word that another appraisal had been ordered due to poor performance of the contract appraisers. As of December 31, 2001, we have learned of no other action being taken on this property.

We were notified by RO Realty that at the September Migratory Bird Conservation Commission meeting approval was granted for the fee title acquisition of the 307 acre Warwick Tract as part of Coldwater River NWR. The deed was recorded on December 26th.

6i. Wilderness and natural areas

Nothing to report.

6j. Threats and conflicts

Nothing to report.

8

Public Education and Recreation

8a. Provide visitor services

On January 24, 2001, personnel from the Private John Allen National Fish Hatchery delivered 1,400 redear sunfish, 2,100 bluegill, and 700 channel catfish to Dahomey NWR. The fish were stocked in the new lake located off Christmas Lake Road. 700 largemouth bass were stocked in the spring.

Dahomey and Tallahatchie NWRs held a youth gun deer hunt during November 10-11, 2001, which coincided with the youth hunt set by the MDWFP. Participation was low this year with only 10 youths participating. One doe was harvested by a youth.

Dahomey NWR boasts one of the largest turkey flocks in the northern delta of Mississippi, but as a result of mosquitos, water and a thick forest understory, hunting is especially tough. Turkey hunters took 2 mature gobblers on the refuge this year.

Public participation during the Dahomey and Tallahatchie NWR's archery seasons decreased from last year. The weather was very wet and mosquitos were plentiful. Only one doe and one buck was harvested at Dahomey NWR. None were taken on Tallahatchie NWR.

The muzzleloader season saw better hunting conditions for deer hunters on Dahomey and Tallahatchie NWRs (Photo 20). The weather was slightly cooler and more conducive to deer hunting. At Dahomey there were 11 bucks and 7 does harvested during the fourteen day season.

No deer have been reported as harvested at Tallahatchie NWR, but hunters reported having seen some "good" bucks. Five squirrels were harvested on Tallahatchie NWR.

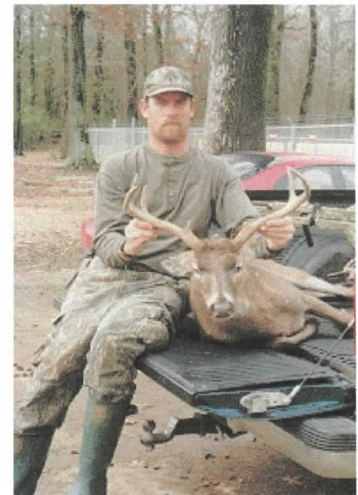


Photo 20. Quality bucks continue to draw many hunters to the woods of Dahomey NWR. Photo by Jeff Lee.

The four day gun hunt at Dahomey was held December 16, 17, 18, and 19. The four days sparked great interest due to the great weather conditions for hunting. For the four day hunt a total of 4 bucks and 1 does were taken.

The 2001-2002 waterfowl season was only the fourth year waterfowl hunting has been permitted on Dahomey and Tallahatchie NWRs. Waterfowl hunting was allowed on Wednesdays, Saturdays, and Sundays from 30 minutes before sunrise until noon. Increased quality and quantity of waterfowl habitat at Dahomey and Tallahatchie NWRs has attracted large numbers of ducks and duck hunters. As more people find out about the waterfowl hunting opportunities at Dahomey and Tallahatchie NWRs, the amount of public use and interest has increased. During calendar year 2001, a total of 119 ducks were taken. This is somewhat lower than anticipated and is attributed more to national weather patterns that delayed the arrival of birds into the Mississippi delta than to wintering habitat conditions on the refuges.

Both refuges are open Monday-Sunday from 30 minutes before sunrise until sunset during the Conservation Order for dark geese.

Fee title FmHA properties in Bolivar, Marshall, Quitman, and Sunflower Counties were opened during state wide season for small game hunting for the third consecutive year. Rabbit hunters have reported excellent success on these areas. The properties total 2,852 acres in size and provide exceptional small game hunting opportunities for the public. WB Woods prepared detailed hunting maps for these small game hunting areas.

Hunters participated heavily in small game hunting opportunities available at Dahomey NWR during the fall 2001. Hunters reported harvesting 130 squirrels and four rabbits.

On September 26-27, 2001, RM Lee, BT Harrigan, and volunteer Cooper planted approximately 20 acres of winter wheat and rye grass at Dahomey NWR. The wildlife planting will be of benefit to wild turkeys and white-tailed deer.

WB Woods developed a database that integrates harvest data and hunter information. The database will expedite determination of hunter-related statistics at Tallahatchie and Dahomey NWRs.

8b. Outreach

During 2001, NMRC staff had the opportunity to participate in a variety of outreach activities. The outreach activities that NMRC participated in during 2001 are identified

below.

- In January 2001 RM Russell met with Wild Wings Hunting Club to discuss management of the Walker Tract, Tallahatchie NWR, and answer a variety of waterfowl conservation and management questions by club members. Wild Wings Hunting Club owns about 1,500 acres adjacent to the Walker tract of Tallahatchie NWR.
- On January 24, 2001, RM Lee made a presentation at the Delta Agriculture Expedition held in Bolivar County. The program was on the topic of the Partners for Fish and Wildlife Program and how farmers in the Mississippi Delta could participate in this program. There were approximately 200 people in attendance.
- In February, RM Russell gave a guest lecture to graduate and undergraduate students in a forest soils course at Mississippi State University. At the request of the professor, Dr. Stephen Schoenholtz, Russell discussed carbon sequestration and reforestation from a “real world” perspective.
- On March 24 and 31, 45 Boy Scouts, Girl Scouts, 4-H members and their parents volunteered at Dahomey NWR to assist BT Harrigan, WB Woods, EO Roby and AA Willis plant trees. The tree planting was a great success. Volunteers planted more

than 900 oaks (water, willow, Nuttall, cherrybark, swamp chestnut), persimmon, sycamore, redbud, baldcypress, elm and blackgum trees. These trees will some day become a forest and provide food and habitat for a variety of species. For their work, each volunteer was given a tree to take home.

- On March 2- 4, BT Harrigan, WB Woods and EO Roby, along with staff from Yazoo NWR participated in the Mississippi Wildlife



Photo 21. NMRC public outreach displays are a big hit, especially with the children. Photo by Bobby Willis.

Expo held in Greenville, MS (Photo 21). Two Service displays were sent up and a variety of brochures and fact sheets were made available to the public. A mammal skull and track game was set up for the kids. The kids had to match a mammal skull with its track. Participants were awarded various prizes including Blue Goose tattoos, posters and coloring books. The Expo was attended by more than 6,000 adults

and children.

- On March 6-8, 2001, BT Harrigan attended a Project Wild Facilitators Workshop at Tara Wildlife in Vicksburg, MS. The workshop was attended by employees of State and Federal agencies. Completion of the workshop allows Kim to offer Wild and Wet workshops to teachers, scouts, and 4-H leaders.
- Becky Woods participated in judging the local science fair. She also presented a program for students at Grenada HS to prepare them for Environthon.
- RM Russell and PL Gard attended a wildfowl seminar and catfish fry hosted by Delta Wings Hunting Club. Delta Wings owns about 3,000 acres adjacent to Tallahatchie NWR. Every other year the club hosts the event and invites Dr. Richard Kaminski and several graduate students from Mississippi State University's Department of Wildlife and Fisheries to discuss recent waterfowl research findings. The event is attended by people from throughout the community, including NRCS, DU, North Mississippi Refuges, local farmers and other hunting clubs.
- On May 23, 2001, RM Lee presented an hour long program on careers within the U.S. Fish and Wildlife Service to over 100 7th graders at Ruleville Middle School.
- RM Russell drafted an article specific to reforestation/restoration entitled NORTH MISSISSIPPI REFUGES COMPLEX WORKS TO RESTORE FORESTED WETLANDS IN MISSISSIPPI DELTA for submission to the Grenada Daily Sentinel Star.
- BT Harrigan assisted Barbara Higginbotham, a junior high school teacher from Cleveland, MS, in preparing several environmental education programs for 3rd and 4th grade students. The programs were centered around forest habitats and the diverse species inherent to such habitat.
- BT Harrigan and WB Woods participated in Refuge Centennial events at Big Branch Marsh NWR during October.
- For the second consecutive year, RM Russell served as Area Chairman for Grenada County Chapter DU. This year's banquet was attended by more than 60 Greenwing members (members 16 years of age or younger), the highest ever in Grenada.
- RM Barkly and WB Woods presented an overview of planned shorebird and waterfowl management practices at Coldwater River NWR to about 25 graduate students taking waterfowl management and ecology taught by Richard Kaminski, Mississippi State University.

9

Planning and Administration

9a. Comprehensive management planning

Nothing to report.

9b. General administration

Funding for CY 2001

Program	Accounting Code	Allocated
Refuge Operations	1261	408.4
MMS	1262	187.5
Initial allocation	6860	53
Firefighting Preparedness	9251	7
Construction	2962	0
Private Lands	1121	370
TOTAL		1,025.9

NMRC Staff



Steve Gard
Project Leader



Robert Barkley
Refuge Manager



Wayne Denton
Refuge Officer



Alejandro Galvan
Refuge Operations Specialist



Kim Harrigan
Biological Technician



Hal Jones
Equipment Operator



Bobbie Willis
Office Automation Assistant



Becky Woods
Wildlife Biologist

Table 14. Staff list for NMRC in 2001.

<u>Permanent Full Time Employees</u>	<u>Grade</u>	<u>EOD Date</u>	<u>Departure Date</u>
1. Stephen W. Gard Project Leader	GS-13	10/08/89	
2. Robert Barkley Refuge Manager	GS-12	05/19/92	
4. Wayne Denton Park Ranger	GS-8	05/28/95	
5. Alejandro Galvan Refuge Operations Specialist	GS-9	10/07/01	
6. Becky Woods Private lands Biologist	GS-9	02/03/01	
5. Kimberly Harrigan Bio. Sci. Technician	GS-7	09/27/98	
6. Jeffery Lee Refuge Manager	GS-11	09/27/98	
7. Ramsey Russell Refuge Manager	GS-11	07/20/98	
8. Bobbie Willis Office Automation Assistant	GS-7	09/28/98	
10. Billy Brasher Equipment Operator	WS-8	04/21/91	08/11/01
11. William "Hal" Jones Equipment Operator	WG-10	08/08/94	
12. Jimmy Perry Equipment Operator	WG-8	07/10/95	11/01/01
13. Don Roby Equipment Operator	WG-8	08/03/98	07/16/01

Equipment Operator **Don Roby** transferred on July 16, 2001 to begin duty as an EO at Hatchie NWR in Tennessee. Don played an important role in the maintenance of Dahomey, Coldwater River and Tallahatchie NWRs. His vigilance ensured that NMRC's extensive heavy equipment inventory remained serviced and that every chainsaw and small engine cranked on the very first pull. Don's energy and enthusiasm will be sorely missed. Hatchie NWR has definitely benefitted from gaining Don on their staff.

Equipment Operator **Billy Brasher's** last day of duty at NMRC was August 11, 2001. Billy retired after 10 years at NMRC to a life of gardening, tending to his pond's burgeoning population of trophy-sized bluegills, and building barns for neighbors and friends. Billy's contributions to the efforts of the Complex were invaluable and will be long-lived. Billy had a hand in nearly every moist soil impoundment created by NMRC during the last ten years. Moreover, his uncanny ability to always build a better mouse trap kept equipment safely on the move regardless of weather or site conditions. Billy was an insightful equipment operator and his lifetime's experiences, combined with a connection to both the local people and to the delta soil were of tremendous benefit to NMRC. Billy remains a good friend to each staff member at NMRC.

Equipment Operator **Jimmy Perry** left on November 1, 2001 after 7 years of employment at NMRC. Jimmy had been on full-time temporary appointment for 3 years when his position was terminated. Always cheerful and forever dependable, Jimmy played a significant role in the reforestation of thousands of acres and in the creation of many miles of levees and refuge roads while on at NMRC. Jimmy remains a good friend to NMRC staff and we wish him the best in future endeavors.

Volunteers

Nothing to report.

Work Programs

The **Youth Conservation Corps** program at NMRC seems to attract some of north Mississippi's finest young men and women. During 2001, many projects were completed by the YCCs that would have never seen the light of day without them. All hunter check stations on Tallahatchie and Dahomey NWRs were completely refurbished by the YCCs (Photo 23). All access gates at Tallahatchie and Dahomey NWRs were painted. The YCCs helped replace boundary signs at Tallahatchie NWR. They assisted our Equipment Operators with numerous wetland habitat restoration projects. Administrative Assistant Willis received invaluable assistance from the YCC



Photo 23. Dahomey NWR YCC participants Coleman and Showers. Photo by Jeff Lee.

program in the form of clerical and office assistance. Several other projects were completed by the summer 2001 YCC team.

YCC participants at Dahomey NWR during 2001 were Richie Coleman and Thomas Showers. At NMRC, participants were Mathew Tassin, Marquittious Tillman, Brandy Bennet, and Lauren Wheeler.

Equipment and Facilities

With the summer of 2001 came the renovation and addition to NMRC headquarters and the long-awaited construction of Dahomey NWR headquarter facilities (Photo 24). Renovation at NMRC headquarters included new tile and carpet flooring, new ceilings and paint. The old conference room was converted into additional office space and a conference room, map room, and restroom facilities were added to the existing building.

During February, the new headquarters facility at Dahomey NWR was completed. The old house trailer that was used as an office was finally removed from the refuge. The new building has an office area, crew room, restroom, tool room, and a shop area. There is also additional space to park equipment under a covered shed at the rear of the building. The entire complex is enclosed behind a six feet tall fence for resource protection purposes and the area within the fence was graveled. Also, a new two-way radio system antenna was erected at the headquarters facility. Other existing facilities within the headquarters complex were painted to match the color of the new building.



**Photo 24. Dahomey NWR's new headquarters building was completed in June.
Photo by Jeff Lee.**

In September, 2001, two concrete slabs were poured at Dahomey NWR. These pads will be used as parking lots for volunteers with travel trailers.

Significant equipment purchases that were made by the NMRC during 2001 include a Ford F-150 extended cab pickup truck. A Ford-350 extended cab four wheel drive truck was also purchased.

Additional Administrative Highlights for 2001

The following are additional administrative activities that occurred at NMRC during 2001:

- On January 9, 2001, RM Lee completed the annual RMIS Oil/Gas/Mineral Activity Report for the NMRC and submitted it to the Regional Office.
- On March 12, 2001, RM Russell submitted a newspaper advertisement to meet the requirement for the Yazoo Management District (YMD) permit renewal application for the well on the Hester III FSA property was sent to the Bolivar Commercial. The YMD review board met on March 27, 2001, and approved the permit renewal application.
- RM Russell completed the Lower Mississippi Alluvial Valley's Joint Venture Reforestation Tracking System information for all 2000-2001 reforestation projects at Dahomey, Tallahatchie, and Coldwater NWRs .
- In April 2001 PL Gard, RMs Barkley, Lee, and Russell, and WB Woods completed CCP and MMS training in Jackson, MS
- On May 17, 2001 RM Russell and PL Gard attended a LAPS workshop in Jackson, MS.
- On May 24, 2001 PL Gard and RMs Barkley and Russell attended the annual refuge hunt plan meeting in Jackson, MS.
- On May 15, 2001 RM Russell participated in a LMR Focus Group meeting, Jackson, MS.
- On May 10, 2001, RM Lee graduated from the Refuge Management Training Academy. The three week training program was held at NCTC. 18-22, 2000.
- RM Barkey Delivered Revenue Sharing checks to Marshall, Quitman and Union counties, Mississippi, in June 2001.

- RM Russell delivered Revenue Share payments to Grenada, Tallahatchie, and Leflore counties, Mississippi, in June 2001.
- RM Lee delivered a revenue sharing check to Bolivar and Sunflower counties, Mississippi, in June 2001.
- RM Russell compiled FY02 reforestation needs on NMRC refuges.
- The Invasive Species report for NMRC was completed by RM Russell in June 2001.
- RMs Russell, Lee, and Barkey, and WB Woods prepared MMS and RONS budget requests for Tallahatchie NWR, Dahomey NWR, Coldwater River NWR, and North Mississippi refuges Complex, respectively.
- In June RM Russell clarified issues specific to “in the field” and “on the ground” facilitation of ESI reforestation projects during a phone conference with Interior Solicitor Judy Kelly, who was drafting an MOU between the Service and ESI. Later that month he reviewed the draft MOU.
- AA Willis attended the Administrative Workshop in Atlanta, GA June 19-22.
- RM Russell processed ESI related reforestation invoices and vouchers and submitted them to the National Fish and Wildlife Foundation so that payment could be disbursed to reforestation contractors.
- RM Russell and WB Woods attended a CCP Workshop in Lafayette, LA June 4-6, 2001.
- WB Woods attended a GIS workshop in Cookeville, TN.
- WB Woods attended a wetlands plant identification workshop at Yazoo NWR.
- WB Woods conducted tours of Coldwater River and Tallahatchie NWRs for visiting Service personnel.
- WB Woods attended the Mississippi Partners for Fish and Wildlife meeting.
- WB Woods attended the Service’s Foundations training course at NCTC.
- WB Woods Attended Basic Aviation Safety Training in September 2001.
- RM Barkley reviewed comments on a proposed letter from USDI’s regional Solicitor

Credits

Barkley, Robert: proof reading

Denton, Wayne: 6a (part)

Galvan, Alejandro: proof reading

Harrigan, Kim: 8a (part), 8b(part)

Lee, Jeffrey: Introduction (part), 1a (part), 3a (part) 3b, 3c, and 3d (part), 6b and 6f, (part) 8a (part), 9a and 9b (part), editing, proof reading

Russell, Ramsey: Everything else!

Willis, Bobbie: proof reading

Becky Woods: 1a and 1b (part), 2a and 2b (part), proof reading.

to the Quitman and Tallahatchie counties Boards of Supervisors requesting the counties abandon the public county-line road that bisects Coldwater NWR.

- On September 27, 2001, RM Lee completed the Public Use and Recreation Report update for NMRC. The update was completed and submitted ahead of schedule.
- RM Bakley created, with assistance from RMs Russell and Lee, and provided the Lower Mississippi Valley Ecosystem Team Leader a summary of the NMRC's annual contribution to the local economy. The report was part of a state-wide effort to inform the Mississippi Congressional Delegation of the economic importance of the National Wildlife Refuge System to the economy of Mississippi.
- In November 2001, WB Woods completed the mapping of boundaries, water control structures, levees, and roads for Coldwater River, Dahomey and Tallahatchie NWRs and every associated fee-title and easement properties.
- RM Russell completed the Recreational Fee Demonstration and Motor Vehicle Acquisitions reports for NMRC.



Photo 25. Watch your step. There's no lack of cottonmouths on properties administered by NMRC. Photo by Becky Woods.